Loudoun County, Virginia

REQUEST FOR PROPOSAL

PUBLIC SAFETY TECHNOLOGY SYSTEMS

ACCEPTANCE DATE:	November 14, 2012, Prior to 4:00 p.m., "Atomic" Time
RFP NUMBER:	QQ-01742
ACCEPTANCE PLACE:	Department of Management and Financial Services Division of Procurement, MSC #41C 1 Harrison Street, SE, 4th Floor Leesburg, Virginia 20175

PLEASE NOTE: State Corporation Commission (SCC) registration requirements effective May 1, 2012 require that your proposal include the identification number issued by the State Corporation Commission as proof of registration **or** justification for non-registration, per the requirements in Sections 8.32 and 11.20. Please complete the Proof of Authority to Transact Business in Virginia form on page 95 of this solicitation and submit it with your proposal. Failure to provide this information or providing inaccurate or purged information shall result in your proposal being rejected.

A Pre-Proposal Conference will be held on Tuesday, October 2, 2012 at 1:00 p.m. in Auditoriums 1 and 2, Department of Fire, Recue and Emergency Management, 16600 Courage Court, Leesburg, VA 20175 for clarification of any questions on the specifications.

Requests for information related to this Proposal should be directed to:

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This document can be downloaded from our web site: www.loudoun.gov/procurement

Issue Date: September 10, 2012

IF YOU NEED ANY REASONABLE ACCOMMODATION FOR ANY TYPE OF DISABILITY IN ORDER TO PARTICIPATE IN THIS PROCUREMENT, PLEASE CONTACT THIS DIVISION AS SOON AS POSSIBLE.

REQUEST FOR PROPOSAL

PUBLIC SAFETY TECHNOLOGY SYSTEMS

SECTION/TITLE PAGE

Prepared By: *s/Sandra A. Lineberry* Date: 9/10/12

Sandra A. Lineberry, CPPB
Contracting Officer

PUBLIC SAFETY TECHNOLOGY SYSTEMS

1.0 PURPOSE

The intent of this Request for Proposal (RFP) is to obtain fixed price proposals from firms specializing in Computer Aided Dispatch (CAD), Mobile Data System (MDS), Corrections Management System (CMS), Volunteer Station Administration System (VSAS), and Law Enforcement and Fire/Rescue Records Management Systems (LERMS and FRMS) hereinafter referred to as "System". The System shall be fully functional and integrated and currently deployed and in use in multiple centers of comparable size. The System must be multi-agency and multi-jurisdictional. Beta systems, or systems that are undergoing major functional changes or enhancements, are not acceptable for the major, industry standard, components. Although Loudoun County (County), is interested in implemented systems with a proven track record and implementation history, that does not exclude vendors from submitting an optional proposals that may utilize .NET or other emerging technologies. The successful firm shall be capable of providing a fully integrated operational turnkey system that is configurable, and includes installation, training, testing, user documentation, cutover/operational support during reliability testing, and conversion services as required herein, as well as system warranty and maintenance to include system update services that include all third-party services and interfaces.

Offering firms shall meet the minimum qualifications contained in Section 4.0. Failure to meet the minimum qualifications shall be cause to reject the proposal as non-responsive.

2.0 COMPETITION INTENDED

It is the County's intent that this RFP permit competition. It shall be the Offerors' responsibility to advise the Purchasing Agent in writing if any language, requirement, specification, etc., or any combination thereof, inadvertently restricts or limits the requirements stated in this RFP to a single Offeror. Such notification must be received by the Purchasing Agent not later than 15 days prior to the date set for acceptance of proposals.

3.0 BACKGROUND INFORMATION

3.1 Emergency Communications Center (ECC) Operations

The County ECC, located at 16600 Courage Court, Leesburg, Virginia, serves as the County's Public Safety Answering Point (PSAP) for fire, rescue and law enforcement incidents. The ECC is a co-located 24/7/365 operation with staff assigned from Department of Fire, Rescue and Emergency Management (Fire/Rescue) and the County Sheriff's Office.

Fire/Rescue is the primary PSAP, answering all incoming 9-1-1 calls and processing all emergency and non-emergency fire and rescue events. Fire/Rescue dispatches all fire and rescue resources within Loudoun County, with the exception of the Metropolitan Washington Airports Authority (MWAA) (Dulles International Airport) stations and Mount Weather Emergency Operations Center. Fire/Rescue transfers all law enforcement-related calls, except Leesburg and the State Police, to the Sheriff's Office secondary PSAP, which is physically located within the same center on the other side of the room. Law enforcement calls received for Leesburg and the State Police are transferred directly to their respective dispatch centers. The Sheriff's Office dispatches their field units and local law enforcement resources for the towns of Purcellville and Middleburg. 9-1-1 calls from airport property that hit the local exchange carrier's public switch are received in the Fire/Rescue PSAP and are transferred to the Airport's communications center. This includes all wireless 9-1-1 calls placed from Airport property.

The ECC currently operates in a call taker and dispatcher operations model for both Fire/Rescue and the Sheriff's Office; each PSAP has staff dedicated to call taking responsibilities. Incoming emergency 9-1-1 calls are answered by a call taker and then processed from that position. Dedicated dispatchers then assign field units to the calls for service and are responsible for all associated tasking.

There are 20 call taker/dispatch console positions in the ECC: nine (9) for Fire/Rescue and eleven (11) for the Sheriff's Office. All positions for Fire/Rescue and the Sheriff's Office PSAPs have been equipped with the necessary critical technology: 9-1-1 answering equipment, CAD system, and radio consoles with connectivity to state and local interfaces.

The County uses TeleStaff™ scheduling and workforce management software for Fire/Rescue, and it is currently being deployed by the Sheriff's Office.

The County maintains a backup facility in the old School System Administration Building located at 102 North Street in Leesburg, which is approximately five (5) miles from the ECC. There are 12 positions at the backup center: six (6) for Fire/Rescue and six (6) for the Sheriff's Office. All positions have the required technology needed for operations: 9-1-1 answering equipment (no ANI/ALI), CAD system, and radio consoles.

The County is currently in the planning stages for a new ECC operations facility. Although it is still early in the planning stage for that facility, it is expected that the new automated systems procurement, installation and 'go-live' will be coordinated with the opening of that facility.

In addition to the Sheriff's Office, there are three (3) local law enforcement agencies within Loudoun County – Leesburg Police Department, Purcellville Police Department and Middleburg Police Department. The Town of Leesburg operates their own law enforcement communications center; respective calls received at the ECC are transferred to Leesburg's communications center.

Table 1 – Law Enforcement Agencies

Law Enforcement Agencies	Department Numbering
Leesburg Police Department	900
Loudoun County Sheriff's Office	200-500[1]
Middleburg Police Department	800
Purcellville Police Department	700

Loudoun County fire and rescue services are provided through a combination system that includes approximately 500 career and more than 1,500 volunteer personnel. There are 26 fire/rescue companies operating out of 21 stations within Loudoun County.

Table 2 – Fire Stations

Station	Company
Aldie Fire & Rescue Company	7
Arcola Pleasant Valley Fire &Rescue	9
Ashburn Fire & Rescue	6
Brambleton Public Safety Center (under construction – open December 31, 2012)	9
Dulles South Public Safety Center	19
Hamilton Public Safety Center	5 & 17
Kincora Fire & Rescue (under construction – open Spring 2013)	24
Lansdowne Public Safety Center	22
Leesburg Fire	1
Leesburg Fire	20
Loudoun County Rescue (Leesburg)	13
Loudoun Heights Fire & Rescue (under construction – open Spring 2013)	26
Lovettsville Fire & Rescue	12
Lucketts Fire & Rescue	10
Middleburg Fire & Rescue	3
Moorefield Fire & Rescue	23
Neersville Fire & Rescue	16
North Sterling Station	18 & 25

[1] The leading digit indicates the station, the second digit indicates the area, and the third digit indicates the number of units on duty in that area. An A, B or C is attached to the end of the unit designation to indicate the shift.

Station	Company
Philomont Fire & Rescue	8
Purcellville Public Safety Center,	2 & 14
Round Hill Fire & Rescue	4
South Sterling Station	11 & 15

As necessary, calls for service are transferred to the Leesburg Police Department, Virginia State Police, and the MWAA for Dulles International Airport.

Table 3 – PSAPs

Loudoun County	
PSAP	**Type**
Loudoun County Fire/Rescue	Primary
Loudoun County Sheriff's Office	Secondary
Town of Leesburg	Public Safety Dispatch Point (PSDP)[2]
Washington Area Airport Authority (Dulles)	PSDP
Mount Weather Emergency Operations Center	PSDP
Virginia State Police	PSDP

Incidents received from outside Loudoun County for one of the County's adjacent eight (8) counties are transferred to the respective jurisdictions.

Table 4 – Adjacent Counties

Adjacent Counties
Clarke County, Virginia
Jefferson County, West Virginia
Montgomery County, Maryland
Frederick County, Maryland
Washington County, Maryland
Fauquier County, Virginia
Prince William County, Virginia
Fairfax County, Virginia

3.1.1 Current Conditions/Tools

Technology support is provided by the various resources assigned to Fire/Rescue, Sheriff's Office, and the Department of Information Technology (DIT). As a co-located facility, the ECC uses shared

[2] 9-1-1 calls are transferred to a PSDP, but they are not equipped to receive any Enhanced 9-1-1 data (ANI/ALI).

technology between Fire/Rescue and Sheriff's Office dispatch operations. For example, the ECC utilizes a single CAD system, 9-1-1 answering system, logging recorder, and other critical technology systems.

3.1.1.1 CAD System

CAD is a critical system that assists call takers and dispatch personnel in processing, prioritizing, dispatching and controlling calls for service for respective emergency service agencies. CAD systems typically consist of several modules that provide call input, call dispatching, call status maintenance, event notes/narrative, field unit status and tracking, and call resolution and disposition. CAD systems also include interfaces that permit the software to provide other critical features and functionality.

The County originally installed and went 'live' with their CAD system in June 1991. The system was originally developed and purchased as an EAI CAD System. EAI CAD System was eventually sold and changed names several times (Bell Atlantic, OCS Technologies, GEAC) and is currently doing business as EnRoute Emergency Systems, based out of Tampa, Florida. The current EnRoute CAD system software in use by the County is multi-discipline; the County uses the law enforcement and fire/rescue modules. The CAD system still runs on the same operating platform that was originally installed. The County did not upgrade to newer Windows-based versions of the software that have been made available through their current vendor.

The CAD software version in use is 5.04.B, with the last software update, service pack 9, in June 2010. The workstation operating system is Windows 7 and the workstation hardware has recently been replaced. The server operating system is IBM AIX 5.3; the current servers were installed in June 2008.

Location validation within the current CAD system utilizes a table-based geo-file for address verification. The table is currently populated utilizing Geographic Information Systems (GIS) mapping data provided by the County; however, the process required to convert and upload this data is multi-step and time-consuming and takes approximately a full day to accomplish. The conversion process is provided by a third-party vendor and is completed by GIS on a bi-weekly basis. Although there is a mapping module available through the CAD system, it was added after the original CAD system installation and provides limited functionality. Multiple map layers are available for display.

The County uses an interface to Deccan's Box-area Automated Runcard Builder (BARB) software to build, maintain and import runcard data into the CAD system. This interface allows the County to plan for and build-out response orders in all areas of the county at least 200 stations deep. This was done to ensure that the ECC never runs out of runcard resources. Deccan's CAD Analyst and ADAM software are also used by the County to determine the most appropriate and accurate run orders.

The recorded event volume (from CAD system statistics) for the previous three (3) years is as follows:

Table 5 – CAD Events

CAD Events				
Year	**2008**	**2009**	**2010**	**Average**
Sheriff	113,130	107,535	118,206	112,957
Fire	8,928	5,552	5,479	6,653
EMS	15,994	15,813	15,906	15,904
Total	**138,052**	**128,900**	**139,591**	**135,514**

The CAD system application originally provided a training module that was available by logging into either a PD demo or FD demo mode. This training module no longer works and all CAD system training is conducted on the 'live' side of the CAD system.

The current CAD system hardware configuration uses four (4) server configurations, with three (3) of the four (4) in a "mirrored" environment. Server A is used as the CAD system production server, server B is being used for RMS and mobile; server C has been designated for testing/training; and server D is the back-up. Servers A, B and D are mirrored.

Table 6 – CAD Servers

Server	Location	Environment
A	ECC	CAD Production
B	DIT	Mobile, RMS
C	DIT	Testing
D	DIT	Back-up

Table 7 depicts typical interfaces found within public safety communications CAD systems and the status of those interfaces with the current system in the County.

Table 7 – CAD Interfaces

CAD Interfaces	Yes/No		CAD Interfaces	Yes/No
Alphanumeric Paging, e-mail and text messaging	Yes		Law Enforcement Mobile Data	Yes
AVL with Routing	Yes		Law Enforcement RMS	Yes
Call Taker/Dispatcher Mapping	Yes		Logging Recorder	No
E9-1-1	Yes		Master Clock	Yes
Emergency Police Dispatch (EPD)	No		Mobile Mapping	Yes
Emergency Fire Dispatch (EFD)	No		Pictometry	No
Emergency Medical Dispatch (EMD)	Yes		Radio Console/Push-to-talk(PTT)/ Emergency	Yes
ePCR (Electronic Patient Care Report)	No		Radio Tone Encoding	No
Fire/Rescue Mobile Data	Yes		Rip & Run	No
Fire RMS	No		Telecommunications Device for the Deaf/Teletypewriter (TDD/TTY)	No
Fire Station Alerting	Yes		Virginia Criminal Information Network (VCIN)/ National Crime Information Center (NCIC)	Yes
Law Enforcement Field Reporting	Yes		Web CAD	Yes

3.1.1.2 CAD Interfaces

The County uses EnRoute's I-STATUS application that integrates with the CAD system to provide near real-time web access to authorized users in the field and allows them to view current event/call information and available resources.

The County uses Priority Dispatch ProQAEMD (Emergency Medical Dispatch) software, which is interfaced with the CAD system. Although there is an interface that exists, when the software is triggered in the CAD system the EMD application opens up on another workstation and the call taker must switch to another computer screen to complete the data entry for the event. When sufficient information is achieved, the call taker sends the event back to CAD for dispatch. ProQA AQUA is used for EMD quality assurance (QA).

3.1.1.3 Discipline Modules

The County ECC currently operates two (2) CAD system modules: law enforcement and fire/EMS. When a multi-discipline event is received and input, the software system generates two (2) pending calls for service – one (1) for law enforcement and one (1) for fire/rescue. Most of the current CAD systems available are capable of being configured as either two (2) or three (3) modules with the other most common module in larger consolidated PSAPs being three (3) (law enforcement, fire and emergency medical services

[EMS]/rescue). Since the County's current CAD system utilizes a two-module scenario, there are no current plans for change.

3.1.1.4 Mobile Data Computers (MDCs)

The County uses EnRoute's mobile application, which is integrated with the existing EnRoute CAD system application. There are approximately 417 MDCs in the field. The County uses vehicle-mounted Panasonic Toughbook CF-18, CF-19, CF-29, CF-30 and CF-31 laptop computers in various law enforcement and fire/rescue vehicles. The CF-18, CF-19, and CF-29, installed in some of the fire/rescue vehicles, are all being replaced by CF-31 units. Fire/Rescue uses Panasonic Toughbook CF-19 tablet computers in the rear of the ambulance units and MDCs are installed in front of the ambulances. The CAD system interface to mobile provides silent dispatch, message switching, status changes, mapping, and routing, and in addition, for police operations, Virginia Criminal Information Network/National Crime Information Center (VCIN/NCIC) queries, RMS and field reporting.

Connectivity to the message switch is managed via Radio over Internet Protocol (IP) software with connectivity over radio data channels using high performance data (HPD) modems, commercial carrier air cards or a County broadband hotspot. For law enforcement, there is an interface to EnRoute's LERMS and mobile field reporting modules. There are individual Garmin global positioning system (GPS) units installed in all mobile units to provide AVL. The GPS units are attached to the MDC via a USB port.

Various staff, such as supervisors, has access to the base CAD system software through wIntegrate graphical user interface (GUI) terminal emulation software installed on the MDCs. Access is limited to a concurrent number of users on the system based on the fixed number of user licenses purchased.

3.1.1.5 9-1-1 Answering Equipment

The ECC uses PlantCML Sentinel 9-1-1 answering positions with ECS1000 back room equipment. The equipment, installed in 2007, is routinely updated by Verizon, the support and maintenance vendor. The answering positions are used to answer all incoming calls, both 9-1-1 and ten-digit administrative, place outgoing calls, and to one-button transfer calls. The County is working toward replacing the current system with a geo-diverse emergency call routing system.

The equipment is capable of receiving enhanced 9-1-1 (E9-1-1) call data. An interface to the CAD system allows the location of wireline calls, Phase I wireless tower locations, and Phase II wireless caller locations to display on the map. For wireless calls, the mapping displays a geographical radius around the location based on the confidence factor provided with the automatic location identification (ALI) data.

The Sentinel answering positions provide instant recall recording (IRR) for all phone calls.

3.1.1.6 Logging Recorder

The ECC uses two (2) Nice NiceLog digital logging recorders: one (1) 120-channel unit purchased in 2007 and one (1) 180-channel unit purchased in 2009. The 120-channel unit records analog telephone and radio traffic, while the 180-recorder is digital IP-based and records the trunked radio talk groups. Staff uses Nice Scenario Replay for remote monitoring and playback and the Inform software for QA purposes. The County is working toward replacing the current logging recorder system.

3.1.1.7 Master Clock

The ECC has a redundant master clock solution utilizing Spectracom Model 9283 master clocks, TimeGuard redundant switch and Ethernet time server. All critical systems, including CAD, 9-1-1 answering positions, radio consoles, and logging recorder, are interfaced to the master clock.

3.1.1.8 Radio Consoles

The ECC uses Motorola MCC7500 radio consoles, installed in December 2009 and last updated in 2011. The consoles provide access to the County's Motorola SmartZone 800 MHz trunked radio system and provide tone encoding over very high frequency (VHF) low band base stations for fire station alerting. The County has recently completed upgrading to a Phase II Project 25 (P25) time division multiple access (TDMA) radio system. The majority of communications conducted in the county is completed on assigned talk groups on the 800 MHz trunked radio system.

Table 8 lists the primary talk groups used in the ECC.

Table 8 – Primary Talk Groups

ID	Discipline/Agency
6A - Dispatch	Fire/Rescue
6B - Response	Fire/Rescue

ID	Discipline/Agency
6C-H Operations	Fire/Rescue
Sterling Dispatch	Sheriff
Dulles Dispatch	Sheriff
Leesburg Dispatch	Leesburg Police Department

A number of other talk groups have been assigned for operations, details, significant incidents/events and other department/agency needs. The radio tone paging for the fire/rescue stations is transmitted over a simulcast VHF low band channel – 46.38.

The MCC7500 radio consoles provide IRR for radio traffic.

3.1.1.9 Trunked Radio Administration

The County uses Genesis GenWatch3 software to monitor, manage and provide reports for their trunked radio system. There is a CAD system interface for emergency button activation with the Genesis Specified Packet Output (GenSPOut) package; data is pulled from the portable radios and sent to the CAD system when an emergency button on a subscriber unit is manually activated. Transferred data includes the radio unit alias name and the radio's latitude and longitude. Portable radio units have been programmed to routinely send their radio unit alias name, latitude and longitude every three (3) minutes and this information is available if needed.

3.1.1.10 Deccan ADAM and CAD Analyst

ADAM and CAD Analyst are fire/rescue software applications provided by Deccan to assist clients with strategic planning decisions. CAD Analyst interfaces with the CAD system and uses historical data to simulate various deployment scenarios to test and evaluate the impact various changes can have on field responses. Both applications are GIS-based and provide managers and supervisors with map-based scenarios that can be displayed and evaluated and then imported for use in reports or demonstrations. The County has also procured Deccan Hyper-Cube and is in the process of implementing this product.

The software applications provide the following:

- Ability to evaluate responses based on apparatus deployment changes/modifications
- Discern impacts based on station additions, closures or relocations
- Depict first due areas based on unit capabilities
- Compare performance changes based on alternate station locations

- Project apparatus line ups
- Analyze career and volunteer performance
- Analyze staffing strengths and weaknesses
- Provide a means to do ‘what if’ analysis
- Average performance for first in units
- Provide percentage of incidents based on performance targets

3.1.1.11 NetMotion

NetMotion is a software application used to help manage mobile data connectivity and provide a mobile virtual private network (VPN) solution. The application provides secure connectivity between the mobile server and the MDCs. This technology also allows mobile users to seamlessly roam in various network environments, including mobile radio, cellular data/broadband, and wireless “hotspots.”

The County uses NetMotion to provide continuous wireless connectivity to their MDCs. This application manages connectivity between the mobile radio channels, wireless hotspots and the Sprint wireless network. The application allows the County to create and apply specific local business rules to control the network. The software allows system administrators to create groups and tailor access based on user needs and agency policies. Roaming profiles are configured and applied to the users to determine the priority sequence of wireless paths used for connectivity.

The client software can be installed on any combination of laptops, tablets, handheld devices and smart phones. HPD radio modems installed in the vehicles are used for connectivity to mobile radio along with air cards for connectivity to the Sprint commercial wireless network.

3.1.1.12 OpenFox™

The ECC uses OpenFox™ law enforcement workstation client software for access to VCIN, NCIC and the National Law Enforcement Telecommunications System (NLETS). This software application is installed in the communications center and is used to administer all VCIN and NCIC entries, deletions and modifications. This includes files such as stolen vehicles, wanted persons, missing persons, and criminal history. This application is also used for switched messaging and “be on the lookout” (BOLO) messages to and from other local, state and federal law enforcement agencies. OpenFox™ is the software application of choice for

access to VCIN by the Virginia State Police, which administers the network.

The existing CAD system provides an interface to VCIN and NCIC; however, its capabilities are limited to query only.

3.1.1.13 First-In® Fire Station Alerting

The County uses WestNet's First-In® fire station alerting software and hardware in five (5) of the fire/rescue stations. The future goal is to have this technology installed in all stations. This interface is used to dispatch apparatus and personnel by providing an automated dispatch announcement, opening the public address systems in the fire stations for the dispatcher announcement, activating a company-specific light indicator and turning on lights in the fire station. This is an IP-based system that has a radio interface backup.

Primary connectivity between the ECC and the master control units (MCUs) installed in the stations is Ethernet, with the First-In radio interface controller (RIC) using wireless radio technology for backup communications. System connectivity is supervised at all times by polling the system and providing error notifications. Fire station alert information is automatically sent from the CAD system or the First-In alerting platform to the RIC, which transmits the information to the fire station MCU. In the event the dispatch computer or network is down, the dispatcher uses the RIC's keypad to manually alert the station. Even in the manual backup mode, the RIC provides station- and company-specific alerting. The RIC system operates on analog and digital radio systems, as well as the new P25 radio system.

Upon receiving an alert from the ECC, the MCU sends a pre-announcement over the station's public address system. This pre-announcement includes audible alerts, resource assignment, incident type, box number and event type. The announcement is generated when the event assignment is viewed in the CAD system by the dispatcher.

A visual indication of the alert is displayed on wall-mounted panels called satellite controllers installed within the station. Colors are associated with the different types of responses:

- Blue = EMS
- Red = Engine
- Green = Truck or Rescue
- Yellow = Specialized Unit

- White = Officer

Notification at the fire station is:

- Pre-announcement
- Message board/lights
- Dispatch announcement
- House lighting activation
- Bay doors open

3.1.1.14 Reverse 9-1-1

Reverse 9-1-1 is a public safety emergency notification system (ENS) provided by Cassidian that is used to provide fast and effective warning or general information messages to citizens and businesses. The software application can provide a multitude of various notifications via recorded messages that may require time-sensitive actions. This can range from an urgent message, such as shelter or evacuation warnings, to providing non-critical messages, such as road closures or planned utility outages. The application can also be used to notify groups of response personnel, both career and volunteer, for quicker mobilization and response.

The software, using a combination of mapping/GIS and general database technology, allows specific notifications by user-created or defined geographical areas. The software can be accessed remotely via a secure browser-based interface to provide easy access for any authorized user.

The system has the ability to send a recorded message to homes and businesses on local phone lines. Because of increased popularity in using mobile phones, the County includes wireless device numbers in their database. To add wireless devices, the County provides an Internet self-registration portal so that anyone can voluntarily visit the site and register devices for notifications.

The software allows optional applications:

- Self-registration portals for the public to either register or update their contact information
- Hosting facilities for high-volume notification purposes
- Can utilize E9-1-1 subscriber data
- Provides resident wellness checks
- HazMat incident directional calling

3.1.1.15 Outdoor Location Tracking (OLT)

The Outdoor Location Solution (OLS) provides location data from both portable (persons) and mobile radios (vehicles). GPS devices connected to the portable and mobile radios transmit location and telemetry data to a third-party software application, Genesis. GenSPOut is a module within Genesis that is used as a formatting and filtering engine for the packet stream data provided by the radio system. This information includes both location and emergency button activation data. Location data includes information such as the radio identifier, alias identifier, latitude, longitude and various data and time stamps.

There is an interface between GenSPOut and the existing CAD system; the data received is integrated into the CAD system mapping application. The data in the CAD system mapping is viewed on the tracking map layer. All emergency button activation messages received will be displayed on the main street centerline map layer and will display the radio ID and last known GPS location of the respective radio.

3.1.1.16 Text and Alphanumeric Paging

An additional feature used within the CAD system is a paging interface that allows text to be sent to various fire and EMS agencies. If the user agencies have paging device capabilities, the dispatcher is either prompted on the unit recommendations screen or the information is transmitted automatically directly from the CAD system. Text messaging can be sent to alphanumeric pagers, cell phones, smart phones, personal digital assistants (PDAs), desktop computers or any device capable of receiving an e-mail or text message. Typically, the information that can be transmitted is incident type, location, community, units due on the assignment and event narrative. The total maximum number of message characters allowed in an alphanumeric message is normally 240, while 160 characters is the typical maximum permitted in an SMS message.

The County currently uses EnRoute's parameterized paging interface. This interface sends pages to personnel carrying alphanumeric pagers or other devices capable of receiving text messages. The interface allows paging features to be set up to be automatically generated, sent in the future, scheduled, or on a one-time only basis.

The interface provides the ability to define multiple vendors that provide paging services (e.g., USA Mobility, Verizon, AT&T, etc.). Each paging vendor is identified in the system by a one-character

code, A through Z. The connection to the vendors can be via dial-up, leased-line modem, or network connectivity to the Internet.

The County is required to set up and maintain paging groups. Individuals assigned to specific paging groups must be added and maintained by the County. The trigger for sending a page, such as unit dispatch or assignment, is determined by a CAD system event for specific event types, location changes, note/narrative additions, etc.

3.1.1.17 Cooper Notification

Cooper Notification is a service that can be used to provide event dispatch information to first responders via text-based messaging. The distribution database for notifications is maintained by the emergency responders via authorized and secure access to Cooper Notification's website. The Roam Secure Alert Network® (RSAN) allows the ECC to send event alerts and other notifications to unlimited communication devices simultaneously from a single web page or an interface to the CAD system. The application can be set up to send manual, automated or pre-defined alerts to an unlimited number of notification devices such as alphanumeric pagers, wireless phones, smart phones, personal digital assistants (PDAs), e-mail accounts and computer desktops.

The County uses the RSAN to contact the public during a major crisis or emergency and keep them informed about other news and on-going/planned events happening in the county. Residents, businesses and the general public can register an account at the Alert Loudoun website to sign up for this service.

Alert types may include life safety, fire, weather, accidents involving utilities or roadways, team activation notifications, or disaster notifications such as a terrorist attack. A few examples of the types of messages that can be sent through Alert Loudoun are:

- Emergency Situations:
  - Notify employees, and/or citizens of the location of the nearest emergency shelter, available bed space, hours of operation during a crisis;
  - Notify employees/citizens of available evacuation routes during an emergency;
  - Activate special teams within the community, based upon an event
- Precautionary Warnings:
  - Severe weather warnings;

- Change in the Homeland Security Advisory System terror alert level
- Pre-cautionary evacuation order if on high alert

Although the County has not implemented the full CAD system interface to Cooper's application programming interface (API), they have installed and are using SMTP to forward mail from the CAD system servers.

3.1.1.18 Priority Dispatch ProQA EMD

EMD is a call processing protocol that relies upon medically-approved and standardized telephone protocols that allow 9-1-1 call takers to classify emergency medical situations and dispatch them in accordance with the resulting priority level. Local response agencies are dispatched in accordance with the response rules developed and approved by the ECC's medical director.

In addition to supporting incident classification and resource assignment, EMD allows for the provision of pre-arrival medical instructions provided by the call taker to the caller while responders are en route to the call. Pre-arrival instructions provided by call takers can result in greatly improved outcomes for seriously injured or ill victims, creating a "zero response time" for help to reach the person in need.

Priority Dispatch ProQA™ medical protocols are available in commercial off-the-shelf (COTS) electronic format that can be interfaced to a CAD system; there is also a card set version that can be used as a back-up or for manual processing.

The program allows for limited local configuration and all changes to the protocols must be approved by a PSAP's medical director and then Priority Dispatch.

3.1.1.19 Advanced Quality Assurance (AQUA™)

AQUA is a software application provided by Priority Dispatch that works in concert with the ProQA software applications. It is a QA, quality control and quality improvement (QC/QI) application that automates the emergency dispatch event review process. The application assists management and supervisors with data entry, compliance scoring, record keeping and reporting. This QA application helps the ECC ensure that call takers and dispatchers provide a quality of service that is in compliance with both local, state and federal standards and/or best practices. The software can identify any specific training needs or risks that could be

improved to provide a better operation to the field units and the public.

3.1.1.20 WebEOC

WebEOC, a software application provided by ESi Acquisition, is an incident and event management system. Authorized emergency managers and first responders can access the software via secure Internet access from any location. The software allows user access to enter and view incident information and associated WebEOC status boards and modules.

WebEOC provides users with a means to manage multiple incidents and events, assign and track missions and tasks, provide situation reports, manage various resources and prepare incident command system (ICS) and incident action plan (IAP) reports.

Some of the most common and standard status boards include the following:

- Significant Events – event and activity tracking
- Mission/Task – assignment and monitor status
- Situation Reports – incident command and emergency service function
- Press Release – displays media related items
- Shelters - status
- Evacuation - tracking
- Federal Emergency Management Agency (FEMA) forms
- Position Log – document actions during shifts
- Section/position Log (finance, logistics, management, operations, planning)

Some of the most common standard and optional modules include the following:

- Chat
- Twitter
- Checklists
- Contacts
- Messaging
- File Library
- Calendar
- Mapping
- Task Tracker
- Resources
- Infrastructure
- Road Closures

- After Action
- Sign In
- Incident Action Plans

3.1.1.21 ImageTrend ePCR

ImageTrend EMS Field Bridge™ is a field based pre-hospital patient care data collection and reporting application. The software assists paramedics and other EMS responders to generate complete, real-time electronic care reports in a mobile environment. Configurable incident run forms allow data to be entered according to the criteria developed by the fire/rescue departments for use by their staff.

Pen-based or touch pad tablet computers are used in the field for the data collection and submission. The data that is gathered can be submitted electronically to an EMS Service Bridge or EMS State Bridge system in order to compile a record or to submit data to the State.

Features include the following:

- Automated data validation to ensure complete records
- Data entry shortcuts
- Customizable form layout
- Digital close for accurate data entry
- Driver's license scanner
- Capture electronic signatures
- Editable and automated narratives
- Ability to send or print at hospital
- Ability to integrate with EKG

Access to the software is security-based to ensure access to authorized users only. The database can be encrypted and password protected. This includes access to all patient sensitive information. The LifeNet wireless communications network is used to share patient ePCR data (EKG transmissions) with the hospitals. The LifeNet software application is available on tablet computers and at the hospitals, which log onto the application to view the patient data.

3.1.1.22 Intranet Status Account (I-Status)

I-Status is an application provided by EnRoute that interfaces with their CAD system application. The application provides near real-time web access via Internet Explorer to current call status information and available resources. It provides County staff with access to CAD system events so that they can monitor operations

and activity related to those events from outside the communications center. Both active and historical data can be viewed.

User access is limited to authorized users based on profiles that have been set up; the profiles provide any necessary filtering and/or access to specific files or information. Active calls screens can be viewed to display incident number, event times, location of the event, nature of the event, etc. Specific events can be viewed to display information such as reporting party name and phone number, cross streets, grids, caution notes, etc. The apparatus assigned to each call and that unit's current status can also be viewed.

3.1.1.23 TeleStaff™ Version 2.7 Virtual Platform

TeleStaff™ is a public safety workforce management software application that assists with scheduling and roster management, automated communications, time tracking, and bidding for requested shifts or days off. Notifications to staff are maintained to identify who was contacted, how they were contacted, and what their response was. Employees can access the software via personal computer, Internet or touch-tone phone for requests, to review messages, notifications and work schedules. The application is capable of using e-mail, fax, telephone, pager, web browser or networked personal computers to communicate with staff.

TeleStaff™ can interface with the CAD system and RMS so staffing and other personnel data can be shared. The software can also be interfaced with other time and labor management systems.

3.2 Law Enforcement

The agencies providing law enforcement services in the county include the Sheriff's Office, the Fire Marshal's Office, and the Leesburg, Purcellville, and Middleburg Police Departments. The Sheriff's Office is the largest law enforcement entity. Leesburg is not part of this procurement, other than the desire to have a CAD-to-CAD interface with their current New World Systems CAD product. Purcellville and Middleburg have mobile access to CAD information sent via the Sheriff's Office CAD dispatch operations. Each has their own LERMS, but will consider partnering as part of this procurement should they assess it to be beneficial.

3.2.1 Current Conditions/Tools

The Sheriff's Office currently uses a number of different systems and tools to assist with job-related activities. These include event and inmate tracking systems, internally accessed records

databases, mobile systems, State required/controlled databases, and web-based/hosted applications.

3.2.1.1 CAD

- Reference: EnRoute
- Version – 5.04.B
- Vendor: EnRoute Emergency Systems

For law enforcement purposes, the CAD system is used as both a method to determine event activity and unit status, as well as an inquiry tool to look up current and past event information, subjects, and as a portal to RMS information contained in the EnRoute LERMS modules. The CAD system can be accessed by any authorized user within the controlled spaces of the County. The level of access is dependent on the authority given within the security of the system. Users can look up previous call information as a method to determine case numbers to help in the inquiry into the case-related information added via direct entry into the LERMS or via the EnRoute Field Reporting product. Supervisors have access to the base CAD system product in their vehicles using MDCs with the use of terminal emulation software wIntegrate. This allows supervisors to see actual CAD calls for service in real-time, allows for immediate updates (instead of being required to manually refresh the information), and provides access to other important information such as on-call lists, premise hazard data, and the ability to look up prior calls via direct access to the CAD system.

This method of CAD access also allows field users to run VCIN/NCIC look ups from the MDC.

3.2.1.2 Mobile

- Reference: EnRoute Law Enforcement Mobile
- Version 6.50.1660 and Version 7.0.1 (currently in the process of upgrading from 6x version to 7x version)
- Vendor: EnRoute Emergency Systems

The EnRoute Mobile product allows field users to get CAD system incident data, limited RMS queries, and VCIN/NCIC queries. It also allows access to caution notes and provides for car-to-car and CAD-to-car messaging. This application provides basic call data upon dispatch, requires a manual refresh by the individual patrol person for any updates to the original call data (i.e., additional narrative information added by dispatch after the original call dispatch), and includes some rudimentary mapping of call location information. This includes routing information to the call using the

responding units' current location based on information provided to the system from in-car GPS units (attached to the MDC via USB port). The Mobile application also allows users to look up information about previous calls-for-service, run VCIN/NCIC look ups, add call notes, and update their status.

3.2.1.3 Handheld CAD Access

- Reference: EnRoute Law Enforcement I-Status
- Version 5.10
- Vendor: EnRoute Emergency Systems

Certain CAD information can be viewed via the EnRoute Systems I-Status application that works on a personal computer (PC) via a web browser or handheld devices, such as a Blackberry or other smart phone. The I-Status application allows users that do not have direct CAD system access (in station or via an MDC) to view current call information (including location and alerts or hazards), units and resources assigned to calls, historical CAD system data (prior calls), as well as general unit status and locations for units not on calls.

3.2.1.4 Field Reporting

- Reference: EnRoute Field Based Reporting
- Version 6.50 (Build 8)
- Vendor: EnRoute Emergency Systems

EnRoute's mobile field reporting program allows the creation of incident reports and associated Incident Based Reporting (IBR) data to be created in the field from MDCs. This application allows for some data transfer from a CAD system call for service, and from that base call information a deputy can then enter the required case elements into a case report form. This field-based case report is then sent to a patrol supervisor for review, approval or rejection, and finally to a holding file on the main system that can be merged into the primary CAD system/RMS database. These reports are uploaded/merged into the EnRoute Law Enforcement Records package by records personnel. The merge process allows for the selection of a Master Name record should the subject be a person that is already in the database, allows for the verification of any address data, as well as the ability to upload other reported case information, such as property, charges, and case narratives.

3.2.1.5 LERMS

- Reference: EnRoute Law Enforcement Records
- Version 5.04.B

- Vendor: EnRoute Emergency Systems

This law enforcement application provides modules for case entry (Subjects, Charges, Property, Narrative), accidents, citations, property, and warrants. This LERMS accepts downloaded field reports from the EnRoute Field Based Reporting product, which requires a data merge to be completed by records personnel.

- Reference: DaProSystems Records Management System
- Version 1.00L SQL Server Edition
- Vendor: DaProSystems, Inc.

DaProSystems RMS is used by the Middleburg and Purcellville Police Departments. The system is used primarily to enter police case information and to collect related IBR reporting data, which is automatically uploaded via a software-based upload process. The following modules are also used:

- Case Management
- Arrest Warrants
- Field Reporting
- BOLO module
- Incident/Case entry
- Field Contacts
- Parking (with no financial or accounting element as that is done via City Hall)
- Accidents/Crash Reports – entered in DaPro, which interfaces to the State Accident reporting product TREDS (Traffic Records Electronic Data System)

3.2.1.6 Law Enforcement Data Sharing

- Reference: LInX system (Law Enforcement Information Exchange)
- Vendor: Northrop Grumman, turned control over to NCIS

This Northrop Grumman-developed software product was created for the Naval Criminal Intelligence Service (NCIS) and is a compilation of data uploaded from neighboring/surrounding jurisdictions in the National Capitol Region (NCR), including agencies in Washington, D.C.; Maryland, and Virginia. The mission of this system/venture is to "…facilitate the timely sharing of accurate criminal justice data across the region for the purpose of more efficiently identifying criminal and terrorist organizations and activities, recognizing crime patterns, suppressing and reducing

crime and protecting critical national assets, thereby enhancing the public's safety."

The system allows inquiry by field units for criminal investigations and subject information from surrounding jurisdictions. Although varying degrees of access are allowed, this is primarily an inquiry-only capability from the field. The County currently uploads the required data for this system via an interface/data dump from the EnRoute Law Records and the DSI-ITI Offender Management products based on special SQL-based data extracts created specifically for the County by the vendor. The LInX system collects the following information: people, places, incidents, arrests, vehicles, crimes, contacts, weapons, pawned items, and field interviews; mug shots to identify persons during traffic stops or investigations; and unstructured data, such as investigative case reports and narratives, follow up reports with available narratives, and investigator case information. The Adult Detention Center (ADC) sends booking data, inmate demographic and contact information, charge(s) information, and inmate alias information to the LInX system.

3.2.1.7 Corrections Management System (CMS)

- Reference: Offender Management System (OMS)
- Version 6.4.14
- Vendor: DSI-ITI LLC

The County currently uses OMS for their CMS system. The product in use is not OMS' current product. The current product is a Windows-based product, whereas the version in use by the County has a GUI to provide some Windows look and feel.

The OMS product includes workflow configuration capability, a booking wizard, scheduling, incident reporting, biometrics, visitation modules, and inmate financial management. The application also interfaces with Victim Information and Notification Everyday (VINE), Safran's MorphoTrak system to scan fingerprints for submission to the State and to the Federal Bureau of Investigation (FBI), and is also integrated with the DSI-ITI inmate telephone system and commissary system. Crystal Reports is utilized to enhance reporting capabilities. Available modules include the following:

- Bookings
- Activities (not implemented)
- Alerts
- Aliases
- Bonds

- Charges
- Clothing
- Detainers
- Housing

3.2.1.8 Accident Reporting

- Reference: TREDS, sponsored by the State of Virginia Division of Motor Vehicles (DMV)
- Vendors: Visual Statement (A Trimble Company), ReportBeam (version 4.9.9.1), and Smart Roads (diagramming – Application version 4.5.4.0, Update 4.5.3.0)

TREDS and ReportBeam are separate systems that run in tandem. TREDS is the web-based submission and storage module maintained by the Virginia DMV. ReportBeam is software offered by Visual Statement that is used to initiate and complete crash reports. These crash reports are transmitted from ReportBeam to TREDS for supervisor review, DMV approval, statistical analysis and retention. The combination of these applications allows field units to input/upload traffic accident information into the Virginia State database for accident reports. It is forms-oriented, and allows deputies to enter required State information on the six (6) required Accident Report pages, including diagramming capabilities provided by an imbedded diagramming product, Smart Roads. The application allows for supervisor approval of submitted accidents, and data analysis of local accident information that has been submitted. Initial implementation in the County occurred in August 2011, with all crashes mandated to be entered for all of Loudoun County on October 1, 2011. The system also is interfaced with the LERMS system to “backload” accident data into the system.

3.2.1.9 Traffic Citations

- Reference: Traffic Citations (alternate capability for future implementation) – QuickTicket and PocketCitation
- Version 5.74 (Handheld) and ReportBeam version 4.9.9.1 (Laptop/MDC)
- Vendor: APS (Advanced Public Safety – a Trimble Company)
- Handheld PDA Devices – Motorola MC75A

The APS electronic ticketing application has been procured and is intended to be implemented in the County in the near future. It is a product provided by the State of Virginia Traffic Court system that allows traffic citation information to be entered in the field via MDCs or provided-for handheld/PDA devices that facilitate entry and dissemination by use of bar-code readers, mag strip readers, and

in-car printers. This is a pilot program that has not been fully implemented within the County.

3.2.1.10 Schools Emergency Response Package

- Reference: RESPONSEnet
- Version 1.7.3.0
- Vendor: Virtual Emergency Services, LLC

Developed for the County's Public School System using grant funding, this product is meant to provide detailed information about each school in the county should there be an incident at a school. RESPONSEnet™ is a web-based emergency preparedness database that enables first responders and client personnel to securely access pre-determined tactical response plans, and to coordinate on-site ICS activities to respond to emergency incidents, including terrorist attacks, disasters, fires, utility breaks and leaks, and hazardous material spills.[3] It provides photographs of the school, evacuation plans, 360 degree video of portions of the school, and floor plan information.

3.2.1.11 License Plate Reader (LPR)

- Reference: Mobile Plate Hunter-900 (MPH-900)
- Version 5.6.0
- Vendor: ElsagNorthAmerica (a Finnmeccanica Company)

The LPR system is a software/hardware package that uses multiple cameras mounted to Sheriff's Office vehicles to read vehicle license plates from the front and/or back of a vehicle. An image of the license plate is stored, the characters of that plate are "read" via Optical Character Reader (OCR) technology, and the plate is run against a "hit list" of missing/stolen/wanted vehicles. Deputies in the vehicle are notified (via audio and visual display) by the system should a hit against the list be found within the license plates being scanned, including the information associated with why it is in the database.

3.2.1.12 Pawn Shop Transactions

- Reference: Regional Automated Property Information Database (RAPID)
- Version - Not Reported
- Vendor: Business Watch International (BWI)

[3] Description from Virtual Emergency Services website, http://www.vemergency.us/joomla/technology/responsenet-overview

The RAPID system is used by numerous local Beltway Region agencies to track pawned property data. The system developed, RPDSS or Regional Pawn Data Sharing System, is a hosted web-based system that standardizes the reporting elements related to pawned property that includes:

- Name
- Address
- Physical Description
- Item type
- Make
- Model
- Serial number
- Item description

The product is Internet-based and can be accessed via the web to enable cross-jurisdictional data sharing. It also allows direct upload from a pawn shop or records department. The application cross-references serial numbers via NCIC stolen article files and provides for a series of different reports and alerts to assist in the management of pawned property information.

3.2.1.13 Narcotics Case Management

- Reference: Drug Trak
- Version 5.8.1028
- Vendor: Police Trak Systems (A division of EMCS, Inc.)

Drug Trak is a database used by the County that allows Special Operations staff to enter information related to narcotics cases, persons related to those cases (including suspects, witnesses, informants, etc.), vehicles, locations, businesses, phone calls and phone numbers, and other information of specific interest to Special Operations activities. The system allows for financial/accounting tracking with the ability to set up accounts and log transactions. It allows for the attachment of all types of digital media to cases and subjects (e.g., photos, video, and audio). The information allows for multiple methods to link associated records, and provides a number of statistical and summary type reports for use by staff.

3.2.1.14 Gang Tracking

- Reference: Gang Trak
- Version 5.8.1028
- Vendor: Police Trak Systems (A division of EMCS, Inc.)

Gang Trak is basically the same database and software used for Narcotics Case Management, but is a stand-alone version used specifically for tracking gang activity, subjects, vehicles, informants, and other gang-related activity and intelligence. The system has all the capabilities listed above for the Drug Trak software.

3.2.1.15 Internal Affairs (IA)

- Reference: Tracking and Investigation - IA-Pro
- Version 5.6
- Vendor: CI Technologies, Inc.

The IA Division enters their investigation information into IA-Pro, using software to track events, personnel, use-of-force, and other related information. IA-Pro is currently operated in a stand-alone mode and does not interface to any other product. Although there are some advanced e-mail integration and other features, the County does not use those elements of the software. The software offers numerous statistical and inquiry reports. The County estimates they may use 50 percent of the available functionality. The Division currently tracks 50 to 70 cases a year.

3.2.1.16 Property Room Bar Coding and Evidence Tracking

- Reference: QueTel Evidence TraQ and QueTel Asset TraQ
- Version Suite 5
- Vendor: QueTel

All property room bar coding and evidence tracking is accomplished using the QueTel Evidence TraQ product. This product was integrated with the LERMS product, but had issues and became stand-alone. The County also uses QueTel's Asset TraQ to provide the Sheriff's Office the ability to track and bar-code internal department assets.

3.2.1.17 Aspen CMV Driver/Vehicle Inspection Management System

- Vendor: North Dakota State University
- Version 2.13.2

This software system was developed by North Dakota State University for the collection of commercial vehicle inspections. It is a stand-alone system where integration with the upcoming consolidated system would provide little or no value.

3.2.1.18 Animal Shelter

- Reference: Chameleon CMS©
- Version 4.643

- Vendor: HLP, Inc.

Animal care facility case management software is used by the County Animal Shelter to track calls and officers in the field, animal intakes and outtakes, euthanizing, and accounting. The software provides reporting and analysis capability.

3.3 Department of Fire, Rescue, and Emergency Management (Fire/Rescue)

Fire/Rescue services are provided through a combination system that includes 500 career and more than 1,500 volunteer personnel. Twenty fire/rescue stations are located throughout the county.

Fire/Rescue, in conjunction with the leadership of the volunteer component, coordinates fire and EMS, which includes emergency response; the administration and delivery of fire, EMS and related training; fire prevention and investigation; hazardous materials, wild land firefighting; and swift water rescue.

Fire/Rescue provides administration of the E-911 ECC, public education, and the coordination and mitigation of large-scale emergencies and disasters utilizing an "all hazards" approach.

It is the mission of the combined fire and EMS system to provide residents and visitors with efficient and cost-effective fire protection, rescue and EMS. Fire and EMS respond to and mitigate hazardous materials and related life safety and property threatening incidents, utilizing state of the art equipment and a staff of highly-trained volunteer and career personnel.

3.3.1 Current Conditions/Tools

3.3.1.1 CAD

The County currently uses EnRoute Emergency Systems CAD module. For fire and rescue purposes, the CAD system assists call takers and dispatch personnel in processing, prioritizing, dispatching and controlling calls for service for the respective agencies. The CAD system is also used as an inquiry tool to look up current and past event and unit information. The CAD system can be accessed by any authorized user within the controlled spaces of the County. The level of access is dependent on the authority given within the security of the system.

Management and supervisory staff have access to the base CAD system product in their vehicles using MDCs with the use of VPN software, wIntegrate. An air card is needed for access to the software with wIntegrate. This application allows users to see actual CAD system calls-for-service information in real-time, allows

for immediate updates (instead of being required to manually refresh the information), and provides access to other important information such as unit status, narrative, premise hazard data, and the ability to look up prior calls.

3.3.1.2 MDCs

The County uses EnRoute Emergency Systems Mobile application. The mobile product allows field users to receive 'silent dispatch,' which is the ability to pull up and view an existing CAD system event and attached information. The mobile application also allows users to view the narrative of events, display caution notes, cross streets, make status changes and provides mobile messaging. Mobile provides basic call data upon dispatch, but requires a manual refresh by the user for any updates to the original call data (i.e., additional narrative information added by dispatch after the original call dispatch). A mobile mapping application displays the call location, including routing information to the call based on the responding unit's current location based on information provided to the system from the vehicle's GPS unit (attached to the MDC via USB port). The MDC-based version allows the user to look up information about previous calls-for-service, add narrative and update their status.

3.3.1.3 Remote Access

The County uses EnRoute Emergency Systems I-Status application. Certain CAD system information can be viewed via the I-Status application that works on a PC via a web browser or handheld devices, such as a Blackberry or other smart phone. The I-Status product allows users that do not have direct CAD system access (in station or via an MDC) to view current call information (including location and alerts or hazards), units and resources assigned to calls, historical CAD system data (prior calls), as well as general unit status and locations for units not on calls.

3.3.1.4 FRMS

The County purchased, but has not implemented, ETI's FRMS.

3.3.1.5 ePCR

The County uses ImageTrend EMS Field Bridge™ for electronic patient care reporting. Field Bridge is a field-based pre-hospital patient care data collection and reporting application. The software assists paramedics and other EMS responders to generate complete, real-time ePCRs in a mobile environment. Configurable incident run forms allow data to be entered according to the criteria developed by the department for use by their staff. There is a FieldBridge LIFPAK 12 defibrillator interface allowing EKG

information to be captured. This information can then be forwarded to the hospitals via Bluetooth connectivity and sent over the LifeNet communications network.

Pen-based or touch pad tablet computers are used in the field for the data collection and submission. The data that is gathered can be submitted electronically to an EMS Service Bridge or EMS State Bridge system in order to compile a record or to submit data to the State. The State mandates the use of the ePCR software application ImageTrend.

3.3.1.6 Priority Dispatch ProQA EMD

The County uses Priority Dispatch's ProQA EMD software applications. Priority Dispatch ProQA™ is a commonly used EMD software application available for use in PSAPs. The software provides the automated tools that are needed to provide pre-hospital patient care. The software application guides the call taker through the process of collecting vital information from the call, obtaining the patient's status, choosing an appropriate dispatch level, and instructing the caller with pre-approved medical protocols until the local emergency units arrive.

3.3.1.7 AQUA™

The County uses Priority Dispatch's AQUA QA software application. AQUA works closely with the ProQA software application and is a QA/QC/QI application used to automate the emergency dispatch event review process. The application assists management and supervisors with the many tasks needed in the QA process such as data entry, compliance scoring, record keeping and reporting.

3.3.1.8 Deccan BARB

The County uses Deccan's BARB runcard builder software application. BARB is a run-card/resource run order map-based software application. The various types of units and the order of those units specific to defined geographical areas (dispatch grid) are defined by the software and then imported into the CAD system. This data is used to determine the appropriate recommendations based on the location of the incident and the call for service type (e.g., structure fire, vehicle fire, accident, etc.)

3.3.1.9 Deccan ADAM and CAD Analyst

The County uses Deccan's Hypercube ADAM (HPC Adam) and CAD Analyst software applications.

ADAM and CAD Analyst are fire/rescue software applications used to assist with strategic planning decisions. CAD Analyst interfaces with CAD/FRMS and uses historical data to simulate various deployment scenarios to test and evaluate the impact various changes can have on field responses. HPC ADAM takes into consideration areas where incident frequency is high and apparatus availability could be an issue. The software considers the probability that units may be busy based on prior CAD system history. Both applications are GIS-based and provide managers and supervisors with map-based scenarios that can be displayed and evaluated and then imported for use in reports or demonstrations.

3.3.1.10 First-In® Fire Station Alerting

The County uses Westnet's First-In® for their fire station alerting solution.

This application is used to notify fire and rescue personnel of an emergency call. Currently the system is installed in five (5) of the fire/rescue stations; the plan is to someday have it installed in all stations. The software has a full range of options from basic alerting to full control of the station.

Primary connectivity between the ECC and the MCU installed in the stations is Ethernet, with the First-In RIC using wireless radio technology for backup communications. System connectivity is supervised at all times by polling the system and notifications. Fire station alert information is automatically sent from the CAD system or the First-In alerting platform to the RIC, which transmits the information to the fire station MCU. In the event the dispatch computer or network is down, the dispatcher uses the RIC's keypad to manually alert the station. Even in the manual backup mode, the RIC provides station- and company-specific alerting. The RIC system operates on analog and digital radio systems, as well as the new P25 radio system.

3.3.1.11 WebEOC

The County Office of Emergency Management uses ESi Acquisition's WebEOC software application. WebEOC is an incident and event management system. Authorized emergency managers and first responders can access the software via secure Internet access from any location. The software allows users access to enter and view incident information and the associated WebEOC status boards and modules. WebEOC provides the users with a means to manage multiple incidents and events,

assign and track missions and tasks, provide situation reports, manage various resources and prepare ICS and IAP reports.

3.3.1.12 FASTER Fleet Management

The County outsources fleet maintenance for heavier vehicles (ambulance, engines, and trucks) to First Vehicle Services. First Vehicle Services uses FASTER fleet management software. Information provided from the system includes invoices, scheduling, down time, report runner, and fuel mileage reports. Work orders can be viewed and tracked via this software. The County School Board is the owner of the FASTER software, which is loaded on their hardware and network. Fire/Rescue is provided access to the software via Citrix.

3.3.1.13 Sprocket Facility Management

The County uses Sprocket Computerized Maintenance Management System (CMMS) for facility management software. This software is an asset management, maintenance management and preventative maintenance application in a single platform. This software application tracks maintenance and operating costs.

3.4 Volunteer Station Administration System (VSAS)

Fire and rescue services in Loudoun County are provided through a combination system that includes approximately 500 career and more than 1,500 volunteer personnel. There are 26 fire/rescue companies operating out of 21 stations located throughout the county.

The Volunteer community of users has outlined specific additional functionality that they have determined are critical components that need to be considered/included within the content and design of the system being procured to provide them additional functions beyond the standard CAD, FRMS, and Mobile System applications. During the past several years, volunteer companies have struggled with various issues associated with the County's retirement points application. At the same time, information reporting burdens to the County, Office of Emergency Medical Services (OEMS), and others have increased. Several stations have sought relief by purchasing station automation products, like Red Alert and EMS Manager, and at least one (1) company has implemented an internally-developed application.

3.4.1 Current Conditions/Tools

The independent departments utilize various spreadsheets, databases, and other automated systems to collect and maintain data, processes, and systems. None of those tools or systems directly impact the specifications related to the VSAS component being specified within this RFP.

3.5 Office of Mapping and Geographic Information (GIS Department)

The County maintains an enterprise GIS-based on ESRI software with 218 users in many different departments, including Fire, Rescue, and Emergency Management Services. There are 365 databases currently maintained in a system development environment (SDE) on a central server. Metadata can be found at http://logis.loudoun.gov/metadata/. Data sets are maintained as needed, and parcels, addresses, and street centerlines are maintained daily. The GIS Department assists the GIS Coordinator for public safety in maintaining the GIS components of the ECC. The GIS Department produces and distributes maps and mapped data sets, assigns addresses, and approves all street names. The County runs ArcGIS 9.3.1 and ArcGIS Server 10 using DB2 for the database. By 2013, the County will likely be using ArcGIS 10x in either DB2 or SQL Server.

3.5.1 Current Conditions/Tools

There are a number of various points, line, area and digital image layers that will be available to the new CAD system mapping.

Table 9 – Available GIS Data

Point		
Address points	Rural Water Supply	Washington & Old Dominion Trail/mile markers
Stations	MWAA Access Gates	Appalachian Trail Points of Interest
Schools	LWA Water and Sewer Structures	
Fire Hydrants	Dulles Greenway Mile Markers	
Line		
Streets	Waterways	Regional Streets (2-mile extend out of county
Washington & Old Dominion Trail		
Area		
Police Areas	Box Areas	CAD Grids
Buildings	Road Casings	Towns
Zip Codes	Census Tracts	Schools
Major Roads	Parks & Recreational Facilities	ADC Page/Block
Flood Planes	Regional County Boundaries	
Digital Photography		
	2012 Image	

The County's GIS and mapping data is thorough and accurate. In the past ten (10) years, the County has been at the top of the list of the fastest growing counties in the nation and the staff has done a good job keeping GIS data accurate and up to date. The County currently averages 20 new streets per month.

The County participates in the Metropolitan Washington Council of Government's NCR Geospatial Data Exchange. This program allows GIS, public safety and emergency response organizations in the region to securely and easily share data across jurisdiction boundaries. This helps various agencies to effectively plan and respond to local events including those that cross jurisdictional lines or require resources from outside the county. This system allows GIS managers and responding agencies to collaborate, maintain, and share common data via a secure, flexible and standardized format.

3.6 CAD-to-CAD

3.6.1 NCR Data Exchange Hub (DEH) Overview

Fire/Rescue's current CAD system requires maintaining other jurisdiction's units within their system and recommending mutual aid units for dispatch based upon a "closest unit" prediction. This method assumes, with no better information available, that each mutual aid unit being recommended is "available" and either in its station or first due area at all times. To ensure accuracy of sending the closest available unit, the ECC has to confirm a unit's availability and location prior to requesting and then initiate that unit's mutual aid dispatch.

Currently, all requests for mutual aid resources are handled verbally by dedicated ring-down telephone lines, with the County calling an adjacent communications center to determine resource availability. If a resource is available, it "belongs" to the requesting jurisdiction for the purpose of dispatch on the call for service in question. Once availability is confirmed, incident information (address, incident type, zone box, radio channel, units) is exchanged and verified over the phone, and the actual dispatch occurs. This method adds one (1) to two (2) minutes to the time necessary to dispatch the unit(s) closest to an incident and can lead to errors or omissions in information. Over the years, various methods have been introduced to standardize and streamline the exchange of information, which has reduced the dispatch time to the bare minimum using the traditional dispatch method.

The fire departments of Alexandria City, Arlington County, and Fairfax County first implemented an automated CAD2CAD solution in February 2010. The CAD2CAD exchange allows the currently participating jurisdictions (Arlington, Alexandria and Fairfax County) to view the real-time status of fire units and request resources for mutual aid directly from within their own CAD systems. Since the

Unit Status and Request for Resources function has been implemented, the time needed to select and dispatch resources for mutual aid has been significantly reduced. Monthly statistics reflect an almost 50 percent reduction in the turn-out time of units responding to mutual aid calls and an almost 78 percent reduction in the amount of time previously taken to transfer the dispatch information manually over the phone.

With the new CAD system procurment and implementation, the County is scheduled to be added and will begin participating in the regional CAD2CAD project with the other existing jurisdictions (Alexandria, Arlington and Fairfax). Prince William County is also procuring a new CAD system and is expected to join the regional project.

3.6.2 NCR DEH Current Project Status

The NCR's CAD2CAD DEH was operationally deployed in February 2010. In Phase I of the project, Alexandria, Arlington County, and Fairfax County fire departments began to use an integrated version of their CAD systems with the following data exchange functionality:

- Unit Status Update
  - Provides real-time unit status for fire and EMS units
- Request For Resource
  - When a CAD system event is generated with units due from another county, a message is sent to the data exchange, which then generates a pending event in the other CAD system
- Request For Resource Update
  - A message is sent back to the originally requesting CAD system indicating that the resource(s) requested were either assigned or rejected

Currently, Phase II of the CAD2CAD project is planned and being implemented. The following are brief descriptions of the enhanced functionality that is expected to be included in Phase II of the NCR CAD2CAD Interoperability project:

- Incident Details
  - Intended to provide more a detailed and complete operating picture; when incidents are updated (e.g., event type code modified, description or comment information added, run order changes, units are removed or added, incident closed out) the update will

be shared with the other CAD systems that have units assigned to the event

- Unit Location Awareness
  - Utilizes actual location information provided through the unit status updates to recommend based on current locations and status
- Notification/Broadcast
  - Ability to send various alert and notification messages to other systems (e.g., unit log off, unit log on, move, general broadcast message and operational status mode change)
- Integrated Notification Actions
  - Provides the ability for the home CAD system to automatically act on various notification or broadcast messages (e.g., unit is logged off in another jurisdiction, the home CAD system will automatically take the unit out of service also)
- Override Operational Status
  - Enhances the override notification to specify either Emergency Override or System Override (currently both are shown as “Override”)

3.6.3 NCR DEH CAD2CAD Command & Control Console

Each agency participating in the regional project has access to a CAD2CAD Command & Control Console. The console is a supplemental application that provides users with the ability to monitor the operational status of all participating jurisdictions, to request additions or deletions of units, change/view unit statuses, maintain incident types, maintain user credentials/security, make changes to their local operational status, and manage the operational status of all local units.

3.6.4 NCR DEH CAD2CAD Dispatch Interface

Each specific CAD system vendor needs to develop and provide a local interface for the regional CAD-to-CAD functionality. Although functionality requirements can be provided by DEH for the interface between the CAD system vendors and the hub, DEH does not provide a functionality matrix for the local user interface. The County will have to work with the successful Offeror to outline the functionality that is needed in the County so that the successful Offeror can develop and provide this interface and the associated user front end.

3.6.5 NCR DEH CAD2CAD Interface Technical Documentation

Offerors should refer to the web site www.ncrnet.us/cad-exchange for a description of the service and the functionality that should be provided by the interface.

The following documents are included as Attachment C of this RFP to provide additional information as it relates to the NCR CAD2CAD interface:

- CAD2CAD Solution Architecture-rv1
- NCR CAD to CAD Data Exchange Technical Requirements 20012_02_03 v3.00 FINAL
- NCR CAD to CAD Data Exchange Functional Requirements 20012_02_03 v3.00 FINAL
- NCR CAD to CAD Data Exchange Hub-Phase II Enhancement Description-20111215-v1.503_FINAL
- Functional_SOP_EXF_1_08_09_2010_vPortal

The County has received grant funding for participation in the NCR CAD2CAD project. The CAD2CAD interface must be installed and functionally tested by December 31, 2013 to secure this funding.

3.6.6 Leesburg CAD2CAD Overview

Fire/Rescue is the primary PSAP in the county and answers all incoming 9-1-1 calls, including emergency calls originating from Leesburg. All law enforcement-related calls for Leesburg are manually transferred to incoming ten-digit phone lines at their dispatch center. Because there are no dedicated 9-1-1 trunks or answering equipment in Leesburg, they do not receive ANI/ALI data.

Leesburg currently uses a New World CAD system that went live June 2008. Leesburg also uses New World Mobile, RMS and field-based reporting (FBR).

As the primary PSAP, Fire/Rescue must first process all incoming 9-1-1 calls for Leesburg. A significant number of these calls are 9-1-1 hang-up calls and/or calls that require both law enforcement and fire/rescue response. All communication with Leesburg is by phone; the caller is either transferred or Fire/Rescue staff manually calls Leesburg via phone to relay information, including the 9-1-1 hang-up calls.

The new System should be capable of a CAD2CAD interface with Leesburg's New World CAD system. The interface should include all associated modules including CAD, Mobile and RMS.

The following functionality is requested for this interface:

1. Ability to create, share and transfer events
2. Ability to view, share and enter event narrative
3. Ability to view event and unit status screens for situational awareness
4. Ability to share BOLOs
5. Messaging
    a. Dispatch-to-dispatch
    b. Mobile-to-mobile
    c. Mobile-to-dispatch
    d. Dispatch-to-mobile
6. Ability to share caution notes
7. Ability to share RMS data

The interface will provide ANI/ALI data captured within the CAD system event to be transferred to Leesburg.

3.7 New 9-1-1 Center

The County recently initiated a project to re-locate the current ECC located at the County's Fire/Rescue training facility, 16600 Courage Court, Leesburg, Virginia. The County purchased two (2) buildings, at 801 and 803 Sycolin Road in Leesburg, Virginia primarily for public safety functions. Space on the second floor above the County's EOC at 801 Sycolin Road has been identified as the preferred site for the construction of the new ECC within the current building's envelope. Space on the first floor of the facility, directly below the area designated for new ECC, is identified as the location of the systems equipment room.

The County's preference would be to procure and implement the new CAD system in conjunction with the new ECC facility project, dependent on if both project schedules allow. The CAD system successful Offeror will be required to work in close coordination with the County's CAD team, County's CAD consultant, and the new ECC facility project team to coordinate the needs for the CAD system as it relates to the new facility.

It is anticipated that the systems equipment room at 801 Sycolin Road will be available for occupancy and equipment installation in November 2012. The current schedule for the new ECC facility indicates that occupancy for the new facility communications floor may be available as soon as January 2014.

The equipment room will provide sufficient space for the installation of the new systems back-room equipment and the facility will provide all emergency power needs including uninterruptable power supply (UPS)

and emergency generator. All positions on the ECC floor will have the necessary power and cabling outlets required for installation.

Dependent on the schedules for both projects there are two (2) options available for the new System installation:

1. Preferred Option: The new System will be installed in the new facility.
2. Secondary Option: The new System back room equipment will be installed in the new facility while the CAD system workstations will be installed within the current ECC. Once the new facility is ready, operations and workstation equipment can be migrated.

The new System network architecture must provide a fault tolerant or high availability solution that includes geographical hardware diversity, connectivity and real-time data replication. The System must be designed to take advantage of existing current automatic fail-over, or other backup technologies that enable continued operation, to provide the ability to withstand single or multiple component failure.

The hardware necessary for disaster recovery and geographical diversity will be installed at the County's back-up ECC located at 102 North Street, Leesburg, Virginia.

Current network connectivity and bandwidth are listed in Table 10.

Table 10 – Network Connectivity

New ECC	801 Sycolin Road	Backbone	10 Gig
		DIT Campus	1 Gig
		Microwave	Dual 255 Mbps
Current ECC	16600 Courage Court	DIT Campus	1 Gig
Back-up ECC	102 North Street	Backbone	1 Gig

4.0 OFFEROR'S MINIMUM QUALIFICATIONS

Offerors must demonstrate that they have the resources and capability to provide the materials and services as described herein. *All Offerors must submit the documentation indicated below with their proposal. Failure to provide any of the required documentation shall be cause for the proposal to be deemed non-responsive and rejected.*

The following criteria shall be met in order to be eligible for this contract:

4.1 Proof of Financial Stability

Offerors shall show proof of a positive balance sheet and profitable business operations for two (2) of the last three (3) years.

4.2 Proof of Experience

Offerors shall demonstrate experience in providing the level of services required to successfully deliver and deploy an operational CAD, Mobile, Corrections Management, and LERMS and FRMS solutions for organizations of a similar size and scope to that of the County, as described herein for a minimum five (5) years. Offerors shall include with their proposal a list of all comparable facilities and locations where the system, including software elements being proposed, has been in use, number of years in use, and pertinent statistics such as number of accounts, etc. The list shall include company name, person to contact, address and telephone number, description of work performed, and the total value of the contract.

5.0 SCOPE OF SERVICES

All proposals must be made on the basis of the requirements contained herein. All Offerors must be able to provide the following:

5.1 Exhibit A – Functional Specifications Matrix – lists the County's general system requirements. Only those firms that can meet the general requirements shall respond.

5.2 Project Manager and Project Schedule

The Contractor shall assign a Project Manager (CPM) with the necessary qualifications and staffing support to assure the successful performance of the tasks involved to ensure that the Project Schedule and Milestones are met.

The CPM's responsibilities shall include the management and timely execution of all tasks and activities required, based upon an agreed upon Statement of Work (SOW), Project Plan, and schedule that will result in the successful completion of the design, integration, testing, cutover and acceptance of the proposed System and related services as defined in this RFP and resulting Contract. Project Management shall include, but is not limited to:

a) Project Coordination
b) Task Oversight and Milestone Completion
c) Project Meetings
d) Schedule Updates
e) Progress Reports

The CPM shall have full responsibility for identifying the need for organizing, scheduling, and conducting technical and/or management meetings required for the successful completion of the work defined in the scope of services resulting from the acceptance of the successful Offeror's proposal. At a minimum, one (1) project management (progress) meeting shall be held every two (2) weeks or as otherwise mutually agreed.

The County shall designate a team consisting of key stakeholders and a Project Manager (PM) to work with the CPM. The CPM shall coordinate and assign project tasks identified as key to the success of the project with County stakeholders. In addition, the CPM shall coordinate all technical project tasks assigned to the Department of Information Technology (DIT).

The CPM shall be responsible for consensus building among the various stakeholders and obtain design approvals, system inputs, agreements, etc., from all agencies and stakeholders involved in or affected by the implementation of this Project. This task requires close and continuous liaison with Fire/Rescue and Sheriff's Office and supporting Departments and/or agencies to assure that the requirements of the Project and the needs of the participating agencies and departments are met in all phases of the project. The list of stakeholders and/or supporting Departments and agencies includes, but is not limited to:

- Fire/Rescue
- Sheriff's Office
- Volunteer Companies
- DIT

The kick-off meeting shall be held within ten (10) business days after Contract execution. As a result, and within ten (10) business days of the kick-off meeting, the successful Offeror's PM shall provide the County a detailed Project Schedule that sets forth the various project phases, Tasks, and Milestone with definitive starting and completion dates. In addition, the CPM shall be responsible for providing weekly updates for approval by the County.

The CPM shall provide a Project Schedule with the effective start date of February 2013. This Project Schedule shall include, but not be limited to the following Major Milestones:

a) Hardware Acquisition
b) Hardware Installation
c) Hardware Readiness Test
d) Software Installation
e) System Administrators Training
f) CAD2CAD Functional Testing

g) Functional Testing
h) Interface Testing
i) Integration Testing
j) Delivery of Documentation
k) Training Schedules
l) Reliability Testing
m) System Acceptance

5.3 Implementation Staff

Contractor implementation staff shall be fully trained and certified by the manufacturer(s) of the system(s) proposed; training shall be up-to-date. In addition, all key implementation staff shall be experienced in similar installations. Resumes shall be provided for all implementation staff, including references for recent customer sites.

Additional requirements include maintaining the involvement of Contractor personnel essential to the project, timely replacing of any staff deemed unqualified by the County, and directing staff to comply with County-specified rules and regulations.

5.4 Training

The Contractor shall provide the necessary training for system administrators, train-the-trainer staff, and staff end users. This training must assure that the users will be capable of continued operation of the System and that systems support staff will be capable of maintaining the System and handling the diagnosis of software problems. The response to the RFP shall include related costs for training materials, e.g., Reference Guides, Tutorials and Related CDs, etc.

The following on-site training is required:

- System Administrators Training
- Call Taker Training
- Dispatcher Training
- Supervisor Training
- Mobile Training
- Field Reporting Training
- LERMS Training
- FRMS Training
- CMS Training
- VSAS Training

5.5 Training Guidelines

The general training approach desired is as follows:

1. Targeted training for specialized functions, i.e. system administrators and technical support personnel for general systems administration and operations, and select staff for application operations, data entry and data maintenance
2. User training for all ECC call takers/dispatchers
3. User training for core LERMS user staff
4. User training for core FRMS user staff
5. Train-the-trainer staff as determined between the contractor and the County

The Contractor shall provide classroom instruction for all call takers/dispatchers, supervisors; various support staff and management to ensure their complete understanding of the functional and operational use of the CAD system, mapping, RMS and other systems. At the completion of the training, staff shall be capable of operating the System at a level of proficiency that will allow them to operate the systems effectively.

Proposed hourly or per course rates shall remain firm for one (1) year following the completion of all training. Rates for subsequent years of refresher training are subject to negotiation. Contractors shall guarantee that the charges for such normal work will be the normal rates or at a price extended by the Contractor to their most favored clients.

Training shall be conducted on-site in County facilities. A copy of all training materials planned to be used by the Contractor shall be delivered to the CPM ten (10) working days prior to the commencement of training. The training plan shall identify any training requirements applicable after implementation and acceptance of the System. Contractors shall include an optional follow up training program.

With the implementation plan, Contractor shall submit a schedule of all proposed training modules in Microsoft Project or other County-approved scheduling tool media with the following information:

- Course summary/outline
- Duration of training for each module
- Audience
- Class size maximum 10 to 30 students
- Location of training
- Student prerequisites

5.6 Training Simulator

The Contractor shall provide a training module that allows users to access all system applications, and associated databases, including the Geofile/mapping system.

Users logged on to the training module must utilize the same commands, forms and system features as users logged on to the live system. Data entered and commands invoked while logged in to the training module must not corrupt the live system or noticeably impede the performance of the live system.

5.7 Documentation

The County requires that Contractors provide documentation, in binders, during the implementation for each functional sub-component as part of the System configuration. The Contractor shall also provide documentation for all software applications (system administrator, system maintenance and user guides), interfaces, and training. The Contractor shall provide at least three (3) copies of all documentation provided by equipment manufacturers and other suppliers to the County. The documentation must be contained in one (1) or more binders or other binding to prevent their loss or destruction.

Examples of these are:

- Operating Software
- Server Manual(s)
- Mapping/GIS Software
- Application Software Reference
- Application Software Tutorial
- Hardware Operations
- Hardware Manual(s)
- User Manual(s)
- System Administrator(s) Manual(s)
- Functional System Description
- As-Built drawings for hardware and network engineering
- File (Database) Set up and Maintenance (File Maintenance Manual)
- Hardware and System Configuration (System Configuration Manual)
- Data Dictionary use in query-building

The County requires that Contractors provide documentation (paper and electronic) for any software that the Contractor supplies as part of the System configuration.

The System documentation shall be consistent with the instructions supplied by the on-line help systems for the application. The System shall include no less than three (3) original copies of documentation describing the use of the system and its administration.

The Contractor shall provide a printed database schematic and data dictionaries to assist the County with the addition of site-specific fields and support for the System. The System shall be fully documented prior to final acceptance of the System by the County. The County shall maintain the right to make a sufficient number of copies of all documentation for its own internal use. Documentation shall include:

- System Overview
- Hardware and System Software Documentation
- System Functional Specification
- System Interface Specifications
- System Administrators Documentation
- End User Documentation (CAD, Mobile, LERMS, FRMS, CMS, VSAS) including abbreviated quick reference guides for each system

5.8 Software Escrow

Prior to Final Acceptance of any system software component, the Contractor agrees to deposit with an agreed upon Escrow Agent a complete Escrow Copy of the final code for any accepted system component. The "Escrow Copy" for purposes of this paragraph will be the source code from which County's executable copy of the software was created. In addition, from time to time thereafter, the Contractor will deposit with the Escrow Agent updated copies of the Escrow Copy including revisions and improvements so that at all times the Escrow Copy will functionally correspond with the software in use by the County.

5.9 Warranties

5.9.1 Warranty Provisions

The following requirements are applicable to all maintenance and repair services supplied by the Contractor or respective subcontractors, both under and outside of warranty.

1. The Contractor shall warrant that all hardware and software supplied by the Contractor and the integration thereof will be free from defects in material, design, and workmanship for the warranty and maintenance period purchased.

2. The Contractor shall provide a minimum one (1) year warranty period from the date of final system acceptance.

The Contractor shall warrant that all hardware and software supplied will be free from defects in material, design, and workmanship for the warranty period and any extended warranty or maintenance period purchased. This warranty shall cover all parts, labor, and travel related to all the hardware and software supplied under the Contract.

3. The Contractor shall provide a detailed description of the offered warranty and any available extended warranty. This description shall include a description of hardware and software support services and system upgrades to be provided. Names, addresses, telephone numbers and contact person for all service facilities shall be identified in the proposal. During the warranty period, the Contractor shall provide support services 24-hours a day, 7-days a week (24/7). This service shall be available any hour of the day via a toll-free dial-up number. The Contractor or its subcontractors shall have the ability to access the System remotely for troubleshooting and to perform system diagnostics.

4. For all critical system problems, major system failures or critical priority software errors reported, the Contractor shall provide an **immediate** response to the incident, and shall initiate corrective action no longer than 30 minutes from time of notification. Within two (2) hours of any critical system problem, major system failure or critical priority software error, Contractor personnel shall be either on-site or logged into the System to analyze the cause of the problem and to effect corrective action. Equipment or components required on-site for emergency maintenance shall be specified and provided.

5. Any hardware procured for this System through the Contractor will require hardware support in the same manner as the software support described in this section.

6. In all instances of a critical system problem, major system failure or critical priority software error, whether hardware or software related, the Contractor, and/or the provided network support partner, shall effect corrective action within four (4) hours of problem reporting or escalate the problem to their senior support staff for their immediate resolution at no added cost to the County.

7. Critical system problems, major system failures and critical priority software errors are defined by the County as the inability of call takers/dispatchers to take calls or dispatch emergency responders to any reported event or the inability of field units to receive call information or transmit service/status notifications. One (1) printer, call taker/ dispatcher or mobile unit/position down will not constitute a critical system problem, major system failure or critical priority software error.

8. The Contractor shall provide documentation of repair escalation policies and procedures to be followed if either a hardware or software problem is not responded to or resolved within the timeframes referenced above. The Contractor shall provide the names and contact information for managers and senior level managers listed in the escalation procedure.

9. The Contractor shall warrant that all hardware and software supplied under the Public Safety Technology contract will be operational and available 99.999 percent of the time during the warranty period or the warranty period will be extended on a day-for-day basis for each day the System performance falls below this level.

10. The Contractor shall provide a detailed statement of warranty exclusions. The County reserves the right to reject any proposal based upon stated exclusion of warranties.

11. The County reserves the right to accept or reject any and all proposed services, vendors, or providers, and/or the use of any proposed service facilities, at the sole discretion of the County.

5.10 General Maintenance Provisions

The following requirements are applicable to all maintenance and repair services supplied by the Contractor or respective subcontractors, both under and outside of warranty.

1. The Contractor shall provide a 5-year system maintenance plan to commence at the expiration of the warranty or, if purchased, after the extended warranty period. This maintenance plan shall cover all labor and travel related to all the software supplied under the Contract, and provide financial rebates to the County if the terms of the Maintenance Agreement are not met.

2. The Contractor shall provide a 5-year system maintenance plan for hardware, to commence at the expiration of the warranty or, if purchased, after the extended warranty period. This maintenance plan shall cover all parts, labor, and travel related to all the hardware supplied under the Contract (if Contractor is providing the hardware), and provide financial rebates to the County if the terms of the Maintenance Agreement are not met. Pricing for the hardware maintenance and warranty requirements need to be priced as **optional**.

3. During the maintenance plan period, the Contractor shall provide support services 24-hours a day, 7-days a week (24/7). This service shall be available any hour of the day via a toll-free dial-up number. The Contractor shall have the ability to remotely access the System via modem or comparable system access methodology, supplied with the system, to troubleshoot and perform system diagnostics.

4. For all critical system problems reported, the Contractor shall provide an **immediate** response, and shall initiate corrective action no longer than 30 minutes from time of notification. Within two (2) hours of any major failure reported, if the problem has not been corrected, Contractor personnel shall be on-site or logged into the system to analyze the cause of the problem and to effect corrective action.

5. In all instances of a major system failure, whether hardware (if Contractor provided) or software related, the Contractor shall effect corrective action within four (4) hours of problem reporting or escalate the problem to the next higher tier of support for immediate resolution at no added cost to the County.

6. Critical system or major failures are defined by the County as the inability of call takers/dispatchers to take calls, monitor units, change status or dispatch emergency responders to any reported event. One (1) printer, call taker/dispatcher or mobile unit/position down will not constitute a critical or major system failure.

7. The Contractor shall provide all labor, equipment, materials, and expenses necessary to ensure that the System is in good operating condition for any period covered under the maintenance agreement. All services provided shall be in conformance with the manufacturer's specifications. The Contractor shall provide software and other materials and expenses necessary to maintain the application software system in good operating condition, including upgrades, as part of the price for maintenance for those

years in which the County has purchased maintenance from the Contractor.

8. Operating software updates for corrections, enhancements, and refinements to purchased capabilities shall be provided by the Contractor as part of the price for maintenance for those years in which the County has purchased maintenance from the Contractor.

9. Hardware updates for the purpose of correcting errors or "engineering change" updates to hardware required routinely by the manufacturer shall be provided by the Contractor as part of the price for network support for those years in which the County purchases maintenance and network support from the Contractor and/or their chosen network support partner. Manufacturer support may also be offered. If manufacturer support is included, any additional cost should be stated.

10. The Contractor shall warrant that all software supplied under the contract will be operational and available 99.999 percent of the time during the maintenance period or the maintenance period will be extended on a day-for-day basis for each day the System performance falls below this level.

11. There shall be no system downtime for routine maintenance or system backups. The Contractor shall provide a detailed explanation of any required (scheduled) system processes that may require downtime.

12. The cost of the maintenance plan shall be itemized on the cost sheets. The County may purchase one (1) or more additional years of support and maintenance, and other specified ongoing services, on a year-by-year basis, or purchase a multi-year support agreement.

13. The County reserves the right to accept or reject any and all proposed services, Contractors or providers, and/or the use of any proposed service facilities, at the sole discretion of the County.

5.11 System Warranty and Ongoing Maintenance Support

The first year of maintenance will be deemed “System Warranty” and shall be provided at no charge to the County.

The Contractor shall provide a fixed cost for maintenance fees for years two (2) through five (5) as provided in the pricing proposal herein. In addition, the Contractor shall provide a fixed percentage for increases for

years thereafter but in no case shall any increase in any given year exceed 10 percent from the previous year's maintenance fees.

It is required that any selected Contractor maintain compliance with all State and Federal mandates, updates, and modifications related to the System as part of the support they provide.

5.12 Help Desk Support

The Contractor shall provide 24/7/365 system support (help desk operations) with dedicated staffing during normal business hours and shall be available for emergencies off hours at all times. Coverage should consist of technical support during the hours M-F from 8:30AM EST until 5:30PM EST, including County-observed holidays, and off hour support from 5:30PM until 8:30AM EST.

5.13 File Back-Up/File Recovery

The County currently utilizes IBM's Tivoli Storage Management Backup and Recovery for their mainframe, servers, and specialized workstations. The County intends to set up Tivoli to take a daily snapshot of the CAD system servers and store the backups in an offsite, secure location. This process should not require the assistance of the Contractor. This process will be used in addition to the proposed backup and restore solution provided by the Contractor.

The Contractor shall provide processes that assure, to a reasonable degree, that upon system failure, disk failure, or other system component failure, that system databases are restored to their pre-failure status and that data integrity is maintained. Recovery from failure shall be provided such that operation may be continued immediately following replacement of the failing component.

6.0 HARDWARE REQUIREMENTS

Offerors shall propose a hardware configuration with adequate storage capacity to accommodate a minimum of five (5) years of incident data for CAD and five (5) years of associated reporting data for the LERMS, FRMS, CMS and VSAS. The System shall be configured such that the System can operate in a multiple task mode without any system degradation.

The County reserves the right to purchase the hardware proposed by Offerors independent of the successful Offeror's proposal. Regardless of the method determined by the County to purchase the hardware proposed, Offerors shall certify that the hardware proposed meets or exceeds the requirements stipulated above related to system performance and storage capacity.

Offerors providing a solution where there are multiple platform options shall provide information on each.

6.1 Detailed Hardware Requirements

6.1.1 Offerors shall provide an overall design using a System Diagram and an overview explanation (no more than two [2] pages) describing the proposed hardware.

6.1.2 Offerors shall describe their plans for future system enhancements to convince the County of the long-term viability of the System architecture and hardware. The installed System shall be capable of expansion in a modular and incremental fashion.

6.1.3 The County anticipates that Microsoft Windows 7 or its successor will be used at the workstation to support the successful Offeror's applications; however, Offerors shall comment on/recommend their preferred workstation operating system. Offerors shall comment on plans for servers and user interfaces, specifically its direction in connection with server and desktop applications to best support the proposed system.

6.1.4 CAD Workstations are projected to be Microsoft Windows-based personal computers, configured with a minimum of four (4) gigabytes of dual channel memory and the most current processors available at the time the hardware is acquired. All call taker/dispatcher positions shall have the ability to operate with a minimum of three (3) monitors from the same workstation. All workstation monitors proposed shall be a minimum of 17-inch digital flat panel displays at the ECC.

6.1.5 The network architecture shall provide a fault tolerant or high availability solution that includes geographical hardware diversity, connectivity and real-time data replication. The System shall be designed to take advantage of existing current automatic fail-over, or other backup technologies that enable continued operation, to provide the ability to withstand single or multiple component failure.

6.1.6 The selected System shall be sized appropriately to meet performance criteria, accommodate any future workload increases and store sufficient event/unit history.

6.1.7 The Contractor shall provide the recommended hardware with capacity requirements for the proposed System solution. In addition, the Contractor shall itemize all required and recommended System software to make the proposed System software operate in the most efficient manner.

6.1.8 The County reserves the right to select or reject Offerors' hardware proposals, independent of the selection of Offerors' software. The County will not select an Offeror's hardware proposal if the County does not select its software. (If Offerors choose not to offer a hardware proposal option, Offerors shall state the hardware requirements for efficient operation of its proposed System.) Offerors shall describe in detail what hardware/software components are included in the cost of its proposal.

Offerors providing a solution where there are multiple platform options shall provide information on each.

6.1.9 Provide proposed hardware and system software configuration(s) as part of Proposal Outline

6.2 General Requirements

6.2.1 The Contractor shall provide all services and supplies necessary to install, operate and maintain the software and equipment specified in the RFP and Exhibit A - Functional Specifications Matrix. The County may elect to increase or decrease quantities or acquire the hardware separately based upon the successful Offeror's provided specifications. Regardless of method of procurement, the successful Offeror shall be responsible for the hardware configuration proposed. Open systems solutions are preferred. Various hardware alternatives as well as separate computer systems for critical mission functions or client/server peer-to-peer operations may be proposed. These solutions or combination of solutions shall support all defined software requirements outlined in Exhibit A–Functional Specifications Matrix.

6.3 Mission Critical Server Hardware Requirements

6.3.1 The County will give preference to a hardware solution that utilizes a de-facto open systems-compliant operating system capable of supporting real-time applications and being supported by the central processing unit (CPU) hardware manufacturer. All server hardware proposed shall meet a system uptime requirement of 99.999 percent.

6.3.2 All application systems shall operate concurrently. If several applications utilize the same data server, the System shall be configured to assure priority workstation response for the CAD system.

6.3.3 The operating systems specified shall be the highest version commercially available with the capability of version upgrade. All operating system and third-party licenses acquired shall be in the

name of and property of the County. The Contractor shall provide all licenses (software, support, etc.) purchased in the name of the County prior to payment for the software. Offerors shall provide the name and version number of the proposed operating system in their proposals. Proposals that incorporate a proprietary or non-standard operating system shall contain an explanation for the choice of operating systems and shall indicate whether it is the Offeror's intention to migrate to an open systems environment in the future. In addition to the operating system, the following software packages, complete with any necessary licenses, shall be specified within the proposal. Offerors shall state the application that is being used for each of the following:

- Operating system
- Industry-standard relational database management system
- Diagnostic package to aid in checking hardware
- Program assembler and loader
- Mapping software (and associated version information)
- Debugging program to aid in isolating software errors
- Any other language processor or utility required to maintain the application software
- Development environment for updating programs
- Utility programs for file handling
- Language compiler in which system is written

6.3.4 All servers proposed shall be configured to support the application software requirements, volumes, and processing performance characteristics defined. The equipment proposed shall be configured with sufficient direct access storage to support timely file query and update for all applications, and retention of data including conversion, if required. The equipment shall be configured with sufficient main memory, disk capacity, and processing capability to facilitate installation of the application programs and peripheral devices for processing information related to the successful Offeror-defined systems and shall possess sufficient expansion capacity to support future requirements (a minimum ten [10] years of projected future growth). The equipment proposed shall be able to function in a multi-tasking capability for simultaneous processing of application systems that are required and shall also support additional workstations required for any future migration of systems to a new facility, should such a transition be required.

7.0 PERFORMANCE CRITERIA

7.1 Performance Requirements

This specification section contains general and specific requirements related to the performance of the proposed system, both at the point of system acceptance and throughout the life of any warranty and maintenance contracts between the County and the Contractor.

System acceptance will occur in phases as various milestones identified in the implementation plan and agreed to by the County are reached. The Contractor shall work closely with the County, their agents and consultants to develop an implementation plan that clearly defines the hardware and software deliverables, tasks or other criteria associated with each milestone. The Contractor's phased implementation plan shall specify how performance testing for each phase will be done.

7.2 Testing

The Contractor shall, as one of the early milestones, submit test plans for the County's review and approval. This test plan shall document how each of the functional specifications are to be tested and how integration testing of all functional elements that are outside of the CAD system and other procured applications will be accomplished. A performance test plan shall also be submitted for review and approval by the County, which includes the performance criteria specified in this section of this RFP. In these plans, the Contractor shall include reasonable remedies for the County to exercise if failures are not corrected in a timely manner.

The test plans shall include scenarios that demonstrate to County personnel that the System will operate as a fully integrated system (hardware/software/interfaces), under operational conditions.

The performance requirements specified in this RFP as part of the 30 day Reliability Test shall be met before the System is accepted and final payment is made by the County to the Contractor.

7.3 System Acceptance (Initial)

The following specifications apply to the requirements for functional testing of the System at the completion of each phase of the overall implementation plan.

Beginning with the first day after the completion of each phase (phases will be specified in the implementation plan), the system phase is operational and available for testing, acceptance testing will be conducted for 15 consecutive calendar days (the acceptance period).

During the testing period, the proposed Public Safety Technology system will undergo a live test using a mix of the functions and applications defined as extremely advantageous in Exhibit A–Functional Specifications Matrix.

During functional acceptance testing (FAT), the Contractor will exercise the System to demonstrate that each function defined as extremely advantageous has been delivered and is operational prior to going "live" on the System. The Contractor shall demonstrate that each additional function not defined as extremely advantageous, but included as part of the system deliverable, also functions as defined in the system documentation and/or user manuals.

7.4 Integration Testing

During integration testing, the Contractor shall demonstrate that each system interface operates in concert with the CAD system to provide information and details related to an event or inquiry. As part of the Phase I and Phase II wireless/wireline testing, the test shall demonstrate that the information received from a wireless and wireline phone can be properly displayed by the appropriate call entry function and that the System will handle re-bid information from a wireless carrier properly when provided.

7.5 Reliability Test (Final Acceptance of the System)

The Reliability Test will be conducted at the completion of all Contractor tasks to demonstrate the operational capability and reliability of the System. In order to successfully complete this test, the Contractor shall demonstrate in live operations that all software supplied under the contract will be operational and available 99.999 percent of the time during the warranty period or the warranty period will be extended on a day-for-day basis for each day the System performance falls below this level.

Once the Contractor has certified to the County that the System is ready for live operational use, the System will undergo a 30-day Reliability Test on a consecutive day basis. The purpose of this test is to demonstrate that the System, as delivered, can perform under live operational conditions without the occurrence of critical priority software errors, as defined in Section 5.9. If the System experiences a critical priority software error during the first 15 days of the reliability test, a new 30-day period will begin once the problem has been corrected. If a critical priority software error is detected on or after day 16 of the initial 30-day test period, once corrected, the test will continue from day 16 and go for the remaining14-day period.

Upon notification from the County of a critical priority software error, the Contractor shall work continuously to resolve the problem. If the Contractor determines that a resolution or workaround cannot reasonably

be provided within 24-hours of notification, the Contractor shall, within the 24-hour period, provide the County with a resolution plan that includes status updates.

Upon successful completion of the Reliability Test, the parties will jointly acknowledge system acceptance in writing. If the Contractor fails to successfully complete the test in this time period, the County may, at its option:

a) Terminate the contract between the County and the Contractor, as specified in Section 8.26.
b) Have the Contractor upgrade the system and augment the implementation team with whatever resources are necessary to bring the System into compliance, at no cost to the County. This team, once deployed, will remain intact and on-site until such time the Contractor can demonstrate full compliance of all system requirements.
c) Have the Contractor recreate any lost data.

Upon the County's determination that there has been a successful completion of the Functional, Performance and Reliability Tests and achievement of all milestones, the County will issue a notice of Final Acceptance.

7.6 Ongoing System Performance

The following specification describes the performance requirements for the System following the County's formal acceptance of the System and throughout the life of the Contract between the County and the Contractor.

For any consecutive 30-day period during the life of the contracts and/or warranties, the software components of the System shall remain fully operational and available at 99.999 percent availability. Thirty day performance periods are incremental from system acceptance. If a problem occurs, a new 30-day period will begin once the problem has been corrected. The County will decide and notify the Contractor when issues have been satisfactorily resolved.

The initial system hardware and software configuration shall be expandable to handle the anticipated increase of work. This expansion shall maintain the specified system performance requirements. The System shall continue to meet the functional, reliability and performance requirements as expressed in this specification throughout the life of the System. In the event that the System fails to meet any requirement the Contract after final acceptance and during the initial warranty period, the Contractor shall take appropriate steps to cure the problem and bring the System back into compliance with the performance and reliability

requirements, at no cost to the County. In the event that the System fails to meet any requirement of this RFP during the maintenance period, the Contractor shall take appropriate steps to cure the problem and bring the System back into compliance with the reliability requirements.

The Contractor shall describe the means and timeframe by which such failure will be resolved, and the County shall agree in writing.

7.7 System Performance Profile

The following performance criteria are provided as a guide in designing the System and form the basis for acceptance testing of the implemented System.

a) The System shall conform to the requirements specified in Sections 6 and 7 of this RFP.
b) The System shall provide all of the functional operational capabilities described as extremely advantageous in this RFP.
c) All inquiry and file maintenance functions shall be performed without adversely affecting system performance and system operations.
d) The System shall provide problem-free interoperability for all the hardware and software components specified in this document.
e) Users shall not be required to halt CAD system operations during backups or other system administration tasks.
f) The proposed MDC system design shall provide for a minimum of 300 active MDCs during the peak busy hour. System design shall provide for this volume of MDCs.
g) Offerors will not be responsible for the processing time of external systems (e.g., VCIN or NCIC) when such systems are involved in a transaction.

7.7.1 System Response Times

The System response time shall not exceed an average of the seconds defined below when operating at three (3) times the expected initial volumes.

7.7.2 Transaction Maximum Response Time for CAD and Mapping

The System shall provide response times of less than one (1) second 95 percent of the time for the following transactions:

1. Display of blank event entry screen
2. Assigning a single unit to an event
3. Changing a single unit's status
4. Clearing a single unit from an event

The System shall provide response times of less than two (2) seconds 99 percent of the time for the following transactions:

1. Verification of a unique address
2. Return of a list of possible address matches when an address cannot be uniquely verified with the information entered
3. Display unit recommendation based on uniquely verified address

7.7.3 Transaction Maximum Response Time for CAD and Mobile Data System

The System shall provide response times of less than five (5) seconds 99 percent of the time for the following transactions:

1. Assignment of up to ten (10) units to an event from a single command
2. MDC-to-MDC e-mail message, 80 characters
3. CAD-MDC dispatch message
4. Call up of premises/hazard file data
5. Display of a list of events queried by unit ID for a single shift

The System shall meet all of the above performance requirements during the printing of reports and the creation of system backups.

7.7.4 Computer System Availability

The following specification defines both System availability and the method by which it is calculated, as it is used in other sections of this RFP.

The System will be considered ***available*** for use only when all the following conditions are met.

- Installed hardware/software components have power applied and are operating correctly.
- All functions and interfaces are installed and all the functional features necessary for the receipt (processing) and dispatching of calls for service and emergency resources are operating correctly.
- System availability will be expressed as a percentage of the maximum expected availability over a given period. The System shall be available 24-hours a day, 7-days a week (24/7).
- Scheduled down time, as defined by the successful Offeror and accepted by the County, will not be construed as hours when the System is unavailable.

The percentage availability for any period will be calculated as follows:

(**Total Hours in Period - Hours System Unavailable) ÷ Total Hours in Period**

For example: In a 30 day period, maximum availability is considered to be 24 hours x 30 days = 720 hours. If the system is unavailable for 7.2 hours during that period, then the availability of the system during the period is (720-7.2) ÷ 720, or 712.8 ÷ 720, which equals 99 percent.

8.0 CONTRACT TERMS AND CONDITIONS

The Contract with the successful Offeror will contain the following Contract Terms and Conditions. Offerors taking exception to these terms and conditions or intending to propose additional or alternative language must (a) identify with specificity the County terms and conditions to which they take exception or seek to amend or replace; and (b) include any additional or different language with their proposal. Failure to both identify with specificity those terms and conditions Offeror takes exception to or seeks to amend or replace as well as to provide Offeror's additional or alternate Contract terms may result in rejection of the proposal. **While the County may accept additional or different language if so provided with the proposal, the Terms and Conditions marked with an asterisk (*) are mandatory and non negotiable.**

8.1 Procedures

The extent and character of the services to be performed by the Contractor shall be subject to the general control and approval of the Director of the assigned Project Manager. The Contractor shall not comply with requests and/or orders issued by other than the Project Manager acting within their authority for the County.

Any change to the Contract must be approved in writing by the Purchasing Agent and the Contractor.

8.2 Contract Assignment

The Contractor is prohibited from assigning, transferring, conveying, subletting, or otherwise disposing of this agreement or its rights, title or interest therein or its power to execute such agreement to any other person, company or corporation without the prior consent and approval in writing by the County.

8.3 Confidentiality and Security

The Contractor shall not copy, display to other parties, or distribute County data without the express written permission from the Director of the Department of Information Technology (DIT).

The Contractor shall not copy, display to other parties, or distribute County-owned programs or proprietary data or information without the express written permission from the DIT Director.

The Contractor shall use only County-approved access technologies for remote access to County networks, servers, and applications. For remote access purposes related to this Contract, the approved access technology is the County's Virtual Private Network (VPN) Services.

The Contractor shall access County networks, servers, and applications only for business reasons associated with the provision of services to the County.

The Contractor shall use hardened passwords for all access related to County networks, servers, and applications. Such passwords shall contain at least eight (8) unique characters that identify the Contractor's staff assigned, and shall contain at least one (1) each: alpha character, numeric character, and special character.

Hardware operating system software and applications software provided through this Contract shall be provided with all known security vulnerability patches applied.

The Contractor acknowledges and understands that its employees may have access to proprietary business information, or other confidential information belonging to the County of Loudoun. Therefore, except as required by law, the Contractor agrees that its employees will not:

a) Access or attempt to access data that is unrelated to their job duties or authorizations as related to this Contract.
b) Access or attempt to access information beyond their stated authorization.
c) Disclose to any other person, or allow any other person access to, any information related to the County or any of its facilities or any other user of this Contract that is proprietary or confidential. Disclosure of information includes, but is not limited to, verbal discussions, FAX transmissions, electronic mail messages, voice mail communication, written documentation, "loaning" computer access codes and/or another transmission or sharing of data.

The Contractor understands that the County, or others may suffer irreparable harm by disclosure of proprietary or confidential information and that the County may seek legal remedies available to it should such disclosure occur. Further, the Contractor understands that violations of this provision will result in Contract termination.

The Contractor understands that information and data obtained during the performance of this Contract shall be considered confidential, during and following the term of this Contract, and will not be divulged without the Purchasing Agent's written consent and then only in strict accordance with prevailing laws. The Contractor shall hold all information provided by the County as proprietary and confidential, and shall make no unauthorized reproduction or distribution of such material.

8.4 Non-visual Access to Technology

All information technology which, pursuant to this Agreement, is purchased or upgraded by or for the use of any state agency or institution or political subdivision of the Commonwealth (the "Technology") shall comply with the following non-visual access standards from the date of purchase or upgrade until the expiration of this agreement:

- Effective, interactive control and use of the Technology shall be readily achievable by non-visual means;
- The Technology equipped for non-visual access shall be compatible with information technology used by other individuals with whom any blind or visually impaired user of the technology interacts;
- Non-visual Access Technology shall be integrated into any networks used to share communications among employees, program participants or the public; and
- The Technology for non-visual access shall have the capability of providing equivalent access by non-visual means to telecommunications or other interconnected network services used by persons who are not blind or visually impaired. Compliance with the foregoing non-visual access standards shall not be required if the County determines that (i) the Technology is not available with non-visual access because the essential elements of the Technology are visual and (ii) non-visual equivalence is not available. Installation of hardware, software or peripheral devices used for non-visual access is not required when the Technology is being used exclusively by individuals who are not blind or visually impaired, but applications programs and underlying operating systems (including the format of the data) used for the manipulation and presentation of information shall permit the installation and effective use of non-visual access software and peripheral devices. If requested, the Contractor must provide a detailed explanation of how compliance with the foregoing non-visual access standards is achieved and a validation of concept demonstration. The herein shall be construed to achieve full compliance with the Information Technology Access Act, §2.2-3500-2.2-3504 of the *Code of Virginia*.

8.5 Delays

If unavoidable delay is foreseen, the Contractor shall give immediate written notice to the Division of Procurement. The Contractor shall keep the County advised at all times of the status of System delivery. Default in meeting major milestone (without accepted reasons) or failure to deliver agreed upon functionality shall result in the County assessing the impact of the delay on the overall delivery schedule for the project and may result in the Division of Procurement authorizing the purchase of supplies and/or services from other sources and charge full increase in cost and handling to defaulting Contractor.

8.6 Delivery Failures

Time is of the essence. Should the Contractor fail to deliver the proper services or item(s) contracted for at the time and place(s) specified, or within a reasonable period of time thereafter as determined by the Purchasing Agent, or should the Contractor fail to make a timely replacement of rejected items when so requested, the County may purchase services or items of comparable quality in the open market to replace the rejected or undelivered services or items. The Contractor shall reimburse the County for all costs in excess of the Contract price when purchases are made in the open market; or, in the event that there is a balance the County owes to the Contractor from prior transactions, an amount equal to the additional expense incurred by the County as a result of the Contractors nonperformance shall be deducted from the balance as payment.

8.7 Material Safety Data Sheets

By law, the County of Loudoun will not receive any materials, products, or chemicals which may be hazardous to an employee's health unless accompanied by a Material Safety Data Sheet (MSDS) when received. This MSDS will be reviewed by the County, and if approved, the materials, product or chemical can be used. If the MSDS is rejected, the Contractor shall identify a substitute that will meet the County’s criteria for approval.

8.8 Business, Professional, and Occupational License Requirement

All firms or individuals located or doing business in The County are required to be licensed in accordance with the County's "Business, Professional, and Occupational Licensing (BPOL) Tax" Ordinance during the initial term of the Contract or any renewal period.

Wholesale and retail merchants **without** a business location in Loudoun County are exempt from this requirement. Questions concerning the BPOL Tax should be directed to the Office of Commissioner of Revenue, telephone (703) 777-0260.

8.9 Payment of Taxes

All Contractors located or owning property in Loudoun County shall assure that all real and personal property taxes are paid. The County will verify payment of all real and personal property taxes by the Contractor prior to the award of any Contract or Contract renewal.

8.10 Insurance

A. The Contractor shall be responsible for its work and every part thereof, and for all materials, tools, equipment, appliances, and property of any and all description used in connection therewith. The Contractor assumes all risk of direct and indirect damage or injury to the property or persons used or employed on or in connection with the work contracted for, and of all damage or injury to any person or property wherever located, resulting from any action, omission, commission or operation under the Contract.

B. The Contractor and all subcontractors shall, during the continuance of the work under the Contract, provide the following:

1. Workers' Compensation and Employer's Liability to protect the Contractor from any liability or damages for any injuries (including death and disability) to any and all of its employees, including any and all liability or damage which may arise by virtue of any statute or law in force within the Commonwealth of Virginia.

2. Comprehensive General Liability insurance to protect the Contractor, and the interest of the County, its officers, employees, and agents against any and all injuries to third parties, including bodily injury and personal injury, wherever located, resulting from any action or operation under the Contract or in connection with the contracted work. The General Liability insurance shall also include the Broad Form Property Damage endorsement, in addition to coverage for explosion, collapse, and underground hazards, where required.

3. Automobile Liability insurance, covering all owned, non-owned, borrowed, leased, or rented vehicles operated by the Contractor.

4. Professional Liability against any and all wrongful acts, errors, or omissions on the part of the Contractor resulting from any action or operation under the Contract or in connection with the contracted work.

C. The Contractor agrees to provide the above referenced policies with the following limits. Liability insurance limits may be arranged by General, Automobile and Professional Liability policies for the full limits required, or by a combination of underlying policies for lesser limits with the remaining limits provided by an Excess or Umbrella Liability policy

1. Workers' Compensation:

Coverage A:	Statutory
Coverage B:	$100,000

2. General Liability:

Per Occurrence:	$5,000,000
Personal/Advertising Injury:	$5,000,000
General Aggregate:	$5,000,000
Products/Completed Operations:	$5,000,000
Fire Damage Legal Liability:	$100,000

GL Coverage, excluding Products and Completed Operations, should be on a Per Project Basis

3. Automobile Liability:

Combined Single Limit:	$5,000,000

4. Professional Liability:

Per Occurrence:	$5,000,000
General Aggregate:	$5,000,000

D. The following provisions shall be agreed to by the Contractor:

1. No change, cancellation, or non-renewal shall be made in any insurance coverage without a forty-five (45) day written notice to the County. The Contractor shall furnish a new certificate prior to any change or cancellation date. The failure of the Contractor to deliver a new and valid certificate will result in suspension of all payments until the new certificate is furnished.

2. Liability Insurance "Claims Made" basis:

   If the liability insurance purchased by the Contractor has been issued on a "claims made" basis, the Contractor must comply with the following additional conditions. The limits of liability and the extensions to be included as described previously in these provisions, remain the same. The Contractor must either:

a. Agree to provide, prior to commencing work under the Contract, certificates of insurance evidencing the above coverage for a period of two (2) years after final payment for the Contract for General Liability policies and five (5) years for Professional Liability policies. This certificate shall evidence a "retroactive date" no later than the beginning of the Contractor's work under this Contract, or

b. Purchase the extended reporting period endorsement for the policy or policies in force during the term of this Contract and evidence the purchase of this extended reporting period endorsement by means of a certificate of insurance or a copy of the endorsement itself.

3. The Contractor must disclose the amount of deductible/self-insured retention applicable to the General Liability, Automobile Liability and Professional Liability policies, if any. The County reserves the right to request additional information to determine if the Contractor has the financial capacity to meet its obligations under a deductible/self-insured plan. If this provision is utilized, the Contractor will be permitted to provide evidence of its ability to fund the deductible/self-insured retention.

4. a. The Contractor agrees to provide insurance issued by companies admitted within the Commonwealth of Virginia, with the Best's Key Rating of at least A:VII.

b. European markets including those based in London, and the domestic surplus lines market that operate on a non-admitted basis are exempt from this requirement provided that the Contractor's broker can provide financial data to establish that a market's policyholder surpluses are equal to or exceed the surpluses that correspond to Best's A:VII Rating.

5. a. The Contractor will provide an original signed Certificate of Insurance and such endorsements as prescribed herein.

b. The Contractor will provide on request certified copies of all insurance coverage related to the Contract within ten (10) business days of request by the County. These certified copies will be sent to the

County from the Contractor's insurance agent or representative. Any request made under this provision shall be deemed confidential and proprietary.

c. Any certificates provided shall indicate the Contract name and number.

6. The County, its officers and employees shall be named as an "additional insured" on the Automobile and General Liability policies and it shall be stated on the Insurance Certificate with the provision that this coverage "is primary to all other coverage the County may possess." (Use “loss payee” where there is an insurable interest.)

7. Compliance by the Contractor with the foregoing requirements as to carrying insurance shall not relieve the Contractor of their liabilities provisions of the Contract.

E. Contractual and other Liability insurance provided under this Contract shall not contain a supervision, inspection or engineering services exclusion that would preclude the County from supervising and/or inspecting the project as to the end result. The Contractor shall assume all on-the-job responsibilities as to the control of persons directly employed by it.

F. Precaution shall be exercised at all times for the protection of Persons (including employees) and property.

G. The Contractor is to comply with the Occupational Safety and Health Act of 1970, Public Law 91-956, as it may apply to this Contract.

H. Any loss insured under subparagraph 6.7.B.4 is to be adjusted with the County and made payable to the County as trustee for the requirements of any applicable mortgagee clause.

I. If an "ACORD" Insurance Certificate form is used by the Contractor's insurance agent, the words "endeavor to" and ". . . but failure to mail such notice shall impose no obligation or liability of any kind upon the company" in the "Cancellation" paragraph of the form shall be deleted.

J. The Contractor agrees to waive all rights of subrogation against the County, its officers, employees, and agents.

8.11 Indemnification

8.11.1 Contractor shall, at its own cost, defend and hold harmless any claim or suit brought against the County on the issue that the software infringes a United States copyright, patent, trademark, trade secret or other intellectual property right of a third party provided that the County (i) notifies Contractor promptly in writing of any such claim or suit; (ii) gives Contractor full information and assistance in settling and/or defending the suit; and (iii) gives Contractor full authority and control of the defense and/or settlement of any such action. Contractor shall not be liable for any costs or expenses incurred (i) by the County without Contractor's prior written authorization; (ii) for any claim based on the use of a combination of the Contractor's software with any other software not provided by Contractor, (iii) for any claim based on the County's modification of the software (iv) from use of other than the latest available version of the software, provided that the version containing the correction of the infringement has been made available to the County at no charge; or (v) any transaction entered into by the County relating to the software without the Contractor's prior written consent.

If the software becomes subject to a claim of infringement for which the Contractor may become liable, Contractor may at its option (i) obtain the right to continue using the software; or (ii) replace or modify the software to make them non-infringing so long as the replacement or modification meets substantially similar specifications; or (iii) County and Contractor may elect to terminate the Agreement in the event that Contractor is unable to perform under (i) and (ii) above. All payment obligations of the County shall be suspended until Contractor provides one of the remedies described.

8.11.2 Contractor shall indemnify, defend, and hold harmless the County and its affiliates, against any liability, demands, damages, expenses, and losses for death, personal injury, illness or property damage arising out of the Contractor's breach of its representations, warranties, or performance, or based on an alleged defect or design error in any element, part or combination thereof in the software.

8.11.3 In the event Contractor becomes liable to County or any other party for direct or any other damages for any cause whatsoever, then the aggregate liability of the Contractor for all damages, injury and liability incurred will be limited to an amount equal to the Contractor's insurance coverage as required in Section 6.10. However, the foregoing limitation shall not apply to:

a) Damages caused by Contractor's gross negligence or intentional acts or omissions;
b) Claims for damages for infringement;

8.11.4 The County is prohibited from indemnifying Contractor and/or any other third parties. Notwithstanding the foregoing, the County shall be responsible for the actions and/or omissions of its board members, officers, employees and agents during their use of the software, including the negligent use, misuse or reproduction of Software. Further, the County expressly waives any and all actions against Contractor for claims resulting from the negligent acts or omissions of the County, its board members, officers, employees and agents. Provided, however, this waiver shall not be deemed to be a waiver of the County's sovereign immunity or defense thereof.

8.12 Safety

All Contractors and subcontractors performing services for the County of Loudoun are required to and shall comply with all Occupational Safety and Health Administration (OSHA), State and County Safety and Occupational Health Standards and any other applicable rules and regulations. Also, all Contractors and subcontractors shall be held responsible for the safety of their employees and any unsafe acts or conditions that may cause injury or damage to any persons or property within and around the work site area under this Contract.

8.13 Notice of Required Disability Legislation Compliance *

Loudoun County government is required to comply with state and federal disability legislation: The Rehabilitation Act of 1973 Section 504, The Americans with Disabilities Act (ADA) for 1990 Title II and The Virginians with Disabilities Act of 1990.

Specifically, Loudoun County, may not, through its contractual and/or financial arrangements, directly or indirectly avoid compliance with Title II of the Americans with Disabilities Act, Public Law 101-336, which prohibits discrimination by public entities on the basis of disability. Subtitle A protects qualified individuals with disability from discrimination on the basis of disability in the services, programs, or activities of all State and local governments. It extends the prohibition of discrimination in federally assisted programs established by the Rehabilitation Act of 1973 Section 504 to all activities of state and local governments, including those that do not receive federal financial assistance, and incorporates specific prohibitions of discrimination on the basis of disability in Titles I, III, and V of the Americans with Disabilities Act. The Virginians with Disabilities Act of 1990 follows the Rehabilitation Act of 1973 Section 504.

8.14 Ethics in Public Contracting *

The provisions contained in Sections 2.2-4367 through 2.2-4377 of the Virginia Public Procurement Act as set forth in the 1950 Code of Virginia, as amended, shall be applicable to all Contracts solicited or entered into by the County. A copy of these provisions may be obtained from the Purchasing Agent upon request.

The above-stated provisions supplement, but do not supersede, other provisions of law including, but not limited to, the Virginia State and Local Government Conflict of Interests Act (§ 2.2-3100 et seq.), the Virginia Governmental Frauds Act (§ 18.2-498.1 et seq.) and Articles 2 and 3 of Chapter 10 of Title 18.2. The provisions apply notwithstanding the fact that the conduct described may not constitute a violation of the Virginia State and Local Government Conflict of Interests Act.

8.15 Employment Discrimination by Contractors Prohibited *

Every Contract of over $10,000 shall include the following provisions:

During the performance of this Contract, the Contractor agrees as follows:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, status as a service disabled veteran, or any other basis prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the Contractor. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
2. The Contractor, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, shall state that such Contractor is an equal opportunity employer.
3. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient to meet this requirement.
4. The Contractor will include the provisions of the foregoing paragraphs, 1, 2, and 3 in every subcontract or purchase order of over $10,000, so that the provisions will be binding upon each subcontractor or Contractor.

8.16 Drug-free Workplace *

Every Contract over $10,000 shall include the following provision:

During the performance of this Contract, the Contractor agrees to (i) provide a drug-free workplace for the Contractor's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or behalf of the Contractor that the Contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over $10,000, so that the provisions will be binding upon each subcontractor or Contractor

For the purposes of this section, "drug-free workplace" means a site for the performance of work done in connection with a specific Contract awarded to a Contractor in accordance with this chapter, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana during the performance of the Contract.

8.17 Faith-Based Organizations *

Loudoun County does not discriminate against faith-based organizations.

8.18 Immigration Reform and Control Act of 1986 *

By entering this Contract, the Contractor certifies that it does not and will not during the performance of this Contract violate the provisions of the Federal Immigration Reform and Control Act of 1986, which prohibits employment of illegal aliens.

8.19 Substitutions

No substitutions, additions or cancellations, including those of key personnel, are permitted after Contract award without written approval by the Division of Procurement. Where specific employees are proposed by the Contractor for the work, those employees shall perform the work as long as those employees work for the Contractor, either as employees or subcontractors, unless the County agrees to a substitution. Substituting project staff will require Contractor to reimburse the County 40 hours of project time toward acclimating staff to current project status. Requests for substitutions shall be reviewed and may be approved by the County at its sole discretion.

8.20 Condition of Items

All items shall be new, in first class condition, including containers suitable for shipment and storage, unless otherwise indicated herein. Verbal agreements to the contrary will not be recognized.

8.21 Workmanship and Inspection

All work under this Contract shall be performed in a skillful and workmanlike manner. The Contractor and its employees shall be professional and courteous at all times. The County may, in writing, require the Contractor to remove any employee from work for reasonable cause as determined by the County. Further, the County may, from time to time, make inspections of the work performed under the Contract. Any inspection by the County does not relieve the Contractor from any responsibility in meeting the Contract requirements.

8.22 Exemption from Taxes *

Pursuant to Va. Code § 58.1-609.1, the County is exempt from Virginia State Sales or Use Taxes and Federal Excise Tax, therefore the Contractor shall not charge the County for Virginia State Sales or Use Taxes or Federal Excise Tax on the finished goods or products provided under the Contract. However, this exemption does not apply to the Contractor, and the Contractor shall be responsible for the payment of any sales, use, or excise tax it incurs in providing the goods required by the Contract, including, but not limited to, taxes on materials purchased by a Contractor for incorporation in or use on a construction project. Nothing in this section shall prohibit the Contractor from including its own sales tax expense in connection with the Contract in its Contract price.

8.23 Ordering, Invoicing and Payment

All work requested under this Contract shall be placed on a County issued Purchase Order. The Contractor shall not accept credit card orders or payments.

The Contractor shall submit invoices in duplicate upon completion of agreed upon project milestones, to include a detailed breakdown of all charges, and shall be based on completion of tasks or deliverables and shall include progress reports. Invoices shall be submitted to:

County of Loudoun, Virginia
Department of Information Technology
Attention: Mick Lemish
Mail Stop Code #47
41975 Loudoun Center Place
Leesburg, VA 20175

All such invoices will be paid within 45 days by the County unless any items thereon are questioned, in which event payment will be withheld pending verification of the amount claimed and the validity of the claim. The Contractor shall provide complete cooperation during any such investigation.

Individual Contractors shall provide their social security numbers, and proprietorships, partnerships, and corporations shall provide their federal employer identification number on the pricing form.

8.24 Payments to Subcontractors *

Within seven days after receipt of amounts paid by the County for work performed by a subcontractor under this Contract, the Contractor shall either:

a) Pay the subcontractor for the proportionate share of the total payment received from the County attributable to the work performed by the subcontractor under this Contract; or
b) Notify the County and subcontractor, in writing, of his intention to withhold all or a part of the subcontractor's payment and the reason for non-payment.
c) The Contractor shall pay interest to the subcontractor on all amounts owed that remain unpaid beyond the seven day period except for amounts withheld as allowed in item B. above.
d) Unless otherwise provided under the terms of this Contract, interest shall accrue at the rate of 1 percent per month.
e) The Contractor shall include in each of its subcontracts a provision requiring each subcontractor to include or otherwise be subject to the same payment and interest requirements as set forth above with respect to each lower-tier subcontractor.
f) The Contractor's obligation to pay an interest charge to a subcontractor pursuant to this provision may not be construed to be an obligation of the County.

8.25 Assignment of Contract *

The Contract may not be assigned in whole or in part without the written consent of the Purchasing Agent.

8.26 Termination

Subject to the provisions below, the Contract may be terminated by the County upon 30 days advance written notice to the Contractor; but if any work or service hereunder is in progress, but not completed as of the date of termination, then the Contract may be extended upon written approval of the County until said work or services are completed and accepted.

a) Termination for Convenience

The County may terminate this Contract for convenience at any time in which the case the parties shall negotiate reasonable termination costs.

b) Termination for Cause

In the event of Termination for Cause, the 30 day advance notice is waived and the Contractor shall not be entitled to termination costs.

c) Termination Due to Unavailability of Funds in Succeeding Fiscal Years

If funds are not appropriated or otherwise made available to support continuation of the performance of this Contract in a subsequent fiscal year, then the Contract shall be canceled and, to the extent permitted by law, the Contractor shall be reimbursed for the reasonable value of any non-recurring costs incurred but not amortized in the price of the supplies or services delivered under the Contract.

8.27 Contractual Disputes *

The Contractor shall give written notice to the Purchasing Agent of intent to file a claim for money or other relief within ten (10) calendar days of the occurrence giving rise to the claim or at the beginning of the work upon which the claim is to be based, whichever is earlier.

The claim, with supporting documentation, shall be submitted to the Purchasing Agent by US Mail, courier, or overnight delivery service, no later than 60 days after final payment. The Contractor shall submit its invoice for final payment within 30 days after completion or delivery of the services. If the claim is not disposed of by agreement, the Purchasing Agent shall reduce his/her decision to writing and mail or otherwise forward a copy thereof to the Contractor within 30 days of the County's receipt of the claim.

The Purchasing Agent's decision shall be final unless the Contractor appeals within 30 days by submitting a written letter of appeal to the County Administrator, or his designee. The County Administrator shall render a decision within 60 days of receipt of the appeal. Each party shall bear its own costs and expenses resulting from any litigation, including attorney's fees.

8.28 Severability *

In the event that any provision shall be adjudged or decreed to be invalid, such ruling shall not invalidate the entire Agreement but shall pertain only to the provision in question and the remaining provisions shall continue to be valid, binding and in full force and effect.

8.29 Applicable Laws/Forum *

This Contract shall be governed in all respects by the laws of the Commonwealth of Virginia. Any judicial action shall be filed in the Commonwealth of Virginia, County of Loudoun. Contractor expressly waives any objection to venue or jurisdiction of the Loudoun County Circuit Court, Loudoun County, Virginia. Contractor expressly consents to waiver of service of process in an action pending in the Loudoun County Circuit Court pursuant to Virginia Code Section 8.01-286.1.

8.30 Notices

All notices and other communications hereunder shall be deemed to have been given to the County when made in writing and either (a) delivered in person, (b) delivered to an agent, such as an overnight or similar delivery service, or (c) deposited in the United States mail, postage prepaid, certified or registered, addressed as follows:

TO CONTRACTOR:

TO COUNTY:

Sandra A. Lineberry, CPPB
Division of Procurement MSC #41C
1 Harrison Street, SE, 4th Floor
Leesburg, Virginia 20175

8.31 Licensure

To the extent required by the Commonwealth of Virginia (*see e.g.* 54.1-1100 *et seq.* of the Code of Virginia) or the County of Loudoun, the Contractor shall be duly licensed to perform the services required to be delivered pursuant to this Contract.

8.32 Authority to Transact Business in Virginia *

A Contractor organized as a stock or nonstock corporation, limited liability company, business trust, or limited partnership or registered as a registered limited liability partnership shall be authorized to transact business in the Commonwealth as a domestic or foreign business entity if so required by Title 13.1 or Title 50 of the Code of Virginia or as otherwise required by law. Any business entity described herein that enters into a Contract with the County pursuant to the Virginia Public Procurement Act 2.2-4300 et seq. shall not allow its existence to lapse or its certificate of authority or registration to transact business in the Commonwealth, if so required under Title 13.1 or Title 50 of the Code of Virginia, to be revoked or cancelled at any time during the term of the Contract. The County may void any Contract with a business entity if the business entity fails to remain in compliance with the provisions of this section.

8.33 Counterparts

This Contract and any amendments or renewals hereto may be executed in a number of counterparts, and each counterpart signature, when taken with the other counterpart signatures, is treated as if executed upon one original of this Contract or any amendment or renewal. A signature by any party to this Contract provided by facsimile or electronic mail is binding upon that party as if it were the original.

9.0 EVALUATION OF PROPOSALS: SELECTION FACTORS

The criteria set forth below will be used in the receipt of proposals and the selection of the successful Offeror.

The criteria set forth below will be used in the receipt of proposals and selection of the successful Offeror. Additionally, preferences will be considered in the allocated points below.

The County Proposal Analysis Group (PAG) will review and evaluate each proposal and selection will be made on the basis of the criteria listed below. The Offerors submitting proposals shall include with that proposal statements on the following:

1. Score related to the provision of functionality outlined in the included Exhibit A - Functional Specifications Matrix (30 points)
2. References from implementations of similar size and scope (comparable size, population, CAD event volume), with the applications being considered in this RFP having been in production for a minimum of one (1) year (5 points)
3. Cost of the system, and the implementation and integration services required (20 points)
4. Quality of technical hardware architecture proposed (5 points)
5. Comprehensiveness of implementation and training services (5 points)
6. Integrated system functionality (10 points)
7. System maintenance and support, upgrades, and on-going technical support (5 points)
8. Adequacy and availability of professional level staffing, credentials, and industry reputation (5 points)
9. Compliance with the contractual terms and conditions as outlined in the included RFP Compliance Checklist. (5 points)

Once each proposal has been evaluated, a composite rating will be developed that indicates the group's collective ranking of the highest rated proposals in a descending order. Once the proposals have been ranked, the top three (3) firms, depending upon the number of proposals received, will be invited for system demonstrations and further discussions. For those firms shortlisted, the following additional evaluation criteria will be considered:

1. System demonstrations and site visits (10 points)

Award and notice to proceed will be made to the best responsive and responsible Offeror meeting the requirements specified in this RFP and offering a service deemed acceptable to the County. The final contract shall be awarded as a firm fixed price contract.

10.0 PROPOSAL SUBMISSION FORMAT AND CONTENT

Offerors are to make written proposals that present the Offeror's qualifications and understanding of the work to be performed. Offerors shall address each of the specific items listed below in the order presented. Each title subsection below shall be separated and identified by individual tabs. Failure to include any of the requested information may be cause for the proposal to be considered non-responsive and rejected.

10.1 Proof of Offeror's Minimum Qualifications

Provide proof of an Offeror's compliance with the minimum requirements as outlined in Section 4.0 of this RFP.

10.2 Review Statements

Provide printed copy of the completed Exhibit A - Functional Specifications Matrix (Excel spreadsheet) identified as "Loudoun County VA RFP Compliance Checklist." In addition, a completed electronic copy of this Functional Matrix portion must be included with the proposal document package. This completed checklist is formatted to indicate an Offeror has read and understands the information contained in Sections 5.0 through 8.0 and that they *'comply', 'comply with clarification' or take an 'exception'* to that paragraph or subsection. If an Offeror provides a '*comply with clarification' or an 'exception*' response, a brief explanation must be provided.

Responses coded as "comply" will carry a greater weight in the final score than those coded as "comply with clarification." Those responses coded "comply with clarification" will carry a greater weight in the final score than those coded as "exception."

This segment also needs to contain the responses to the following questions and scenarios:

10.3 GIS Questions/Scenarios

The County maintains two (2) address points for every structure – structure location and access location. The structure location is used for address verification and the access location is used for routing.

There are a number of addressing anomalies within the county that are of concern. Several cause problems or additional workload within the

current CAD system. Currently, GIS staff must provide workarounds or place “band-aids” on systems and/or data to ensure the addressing anomalies do not cause problems with call processing or delay responses. The County is interested in hearing from Offerors on how their systems will be impacted and/or have addressed these types of GIS anomalies in any past installations:

- Two (2) Ranges on the Same Street
  The County has existing streets that contain two (2) valid address ranges on the same street (e.g. 1317 to 1439 and 45570 to 45655). Some of these streets have even and odd for the two (2) ranges on opposite sides of the street. In addition, some of these streets have the low to high ranges running in opposite directions.

- Discontinuous Streets
  Roads sometimes become bisected by improvements to other roadways. This results in two (2) different road segments with no continuity between them.

- Sound Alike Street Names
  The County has a number of “sound-alike” street names such as:
  - Walsh Farm Lane (Bluemont) and Welsh Farm Lane (Purcellville)
  - Chapel Hill Court (Round Hill) and Chappelle Hill Road (Purcellville)

- Rural Lanes
  The County has a number of rural lanes that are not named but have five (5) or more addressable structures located on the lane. All structures on lanes such as this are addressed off the street in which the lane originates.

Offerors must describe in two (2) pages or less how their proposed solution will handle each of the above four (4) addressing anomalies. Offerors must indicate:

- If Offerors anticipate an anomaly listed above will cause problems/issues with their proposed solution. If so, describe the issues anticipated.
- If problems/issues are anticipated does the Offeror have any recommended solutions?
- Has the Offeror dealt with similar issues in past projects and how were they addressed?

The County maintains two (2) address points for every structure – structure location and access location. The structure location is used for

address verification and the access location is used for routing. Offerors must indicate:

- If their solution can validate addresses using the structure address point location and if routing instructions will be generated using the structure access address point.

  The County has struggled with the processes required by their current vendor to bring detailed GIS mapping data into that product for use within the CAD system. The process requires significant data manipulation, conversion and additional processing to make the map data useable. Because of the cumbersome nature of the current process, Offerors must describe:

- The process used to load and update map data taken from the County's GIS dataset into their product for use with all of the applicable modules.

10.4 Law Enforcement Reporting Process Questions/Scenarios

The County currently uses an integrated CAD/Mobile/Field Reporting/RMS product. The County understands that the provision of this type of functionality, at a high level, follows a fairly common flow throughout the market. However, the County struggles with data translation between the modular legs of this process (viable and relevant data from one leg not translating into the next, which increases redundant data entry), struggles with the Mobile Application staying on-line and available, and when the system drops and then comes back on-line, at times introduces corrupted data into the system. Also, there is little available in the way of accountability for incomplete reports, reports that are still in process (review/approval/rejection), or the agency's ability to know when there are outstanding reports that are unaccounted for. There is little in the way of allowing intervention and inquiry into the reporting process for administrator/supervisor intervention to help resolve the problems resulting from these difficulties. The inability to get information contained in an incomplete ("unfinalized") report that may be required by other agency personnel or other County departments, which can be crucial to the continuing investigation and adjudication process, has at times had a severe negative impact.

- Offerors must describe in three (3) pages or less the flow of information from a CAD system event, through mobile, into field reporting, and merger into RMS. This should include information the Offeror can give that will help reduce and/or resolve the issues outlined above.

10.5 CAD2CAD Questions/Scenarios

Offerors must describe in three (3) pages or less how their proposed solution will provide:

- The ability to interface to the NCR CAD2CAD data exchange and provide both Phase I and Phase II functionality at cut-over.
- The ability to meet the functional testing deadline of December 31, 2013 to secure available grant money.

Within the three (3) pages, Offerors must also describe any similar projects with a similar interface that the Offeror has installed and that is operational.

10.6 Leesburg CAD2CAD Requirements Questions/Scenarios

Offerors must describe in two (2) pages or less how their proposed solution will provide:

- A CAD2CAD interface to Leesburg.
- The ability for the Offeror to provide the requested functionality. Offerors must address each functional item individually and indicate if they will be able to provide that functionality or not.

Within the two (2) pages, Offerors must describe any similar projects with a similar interface that the Offeror has installed and that is operational.

10.7 Fire/Rescue Questions/Scenarios

Because of the combination of career and volunteer staff, there may be some unique situations that must be overcome for the new system. These include:

- Each agency has their own State Assigned ID that is used for National Fire Incident Reporting System (NFIRS) reporting.
- Units within a station may be staffed by career and/or volunteer firefighters.
- Volunteers may be a member of multiple agencies.
- Career members may also be volunteers within other agencies.

The goal of the new System would be that all personnel have a single record or profile in which all activity associated to that member is collected and maintained.

Offerors must describe in three (3) pages or less how their proposed solution will provide:

- NFIRS reporting for agencies within the county using multiple State Agency ID numbers.
- Ability for Offeror's RMS solution to address individuals who may be members in multiple agencies and have records associated to them in more than one (1) agency. This includes, but is not limited to:

    - Personnel records
    - Training
    - Certifications
    - Fire station activity
    - State Agency ID

10.8 Exhibit A - Functional Specifications Matrix

Provide a printed copy of the completed Exhibit A – Functional Specifications Matrix (Excel spreadsheet) with each item marked. In addition, a completed electronic copy (the actual Excel spreadsheet with responses filled in) of the Functional Matrix must be included with the proposal document *package*.

The functional specifications included in this RFP have the following properties associated with them:

- Specifications may appear to be conflicting, where a requirement may request a specific function be provided in one way, and be followed by a requirement that requests that same function be provisioned for in a different (or potentially conflicting) fashion. Example:

  LMNI-2 = All master name activity for a subject for all jurisdictions can be accessed via one record.
  LMNI-3 = Master name records for the same subject are separated by jurisdiction.

- The intent of specifications like those above is to provide a better understanding of each Offeror's method of provisioning the given functional feature.

- The specifications are labeled with the following importance categories:
    - Advantageous
    - Highly Advantageous
    - Extremely Advantageous

- The higher the category of importance, the greater weight in scoring those specifications will carry.

- The functional specifications outlined in the SYSTEM and COMMON tabs (included as part of the CAD MAIN Functional Specification Spreadsheet) represent system requirements as a whole, and common functional requirements that apply to all packages and modules being proposed.

10.9 Explanations of Exceptions

Provide an explanation of any "*exceptions*" taken to functions that appear in Exhibit A—Functional Specifications Matrix. Any "clarifications" provided for any numbered requirement that has been asserted to be in an available function in the Functional Matrix will generally negate a "*Function Available*" statement; this will cause an Offeror to be judged non-compliant for the specific requirement. For the purposes of this RFP, items not answered or marked as an exception on the matrix will be interpreted as ”Function Not Available”, and will be factored accordingly for scoring purposes. Once a short list of preferred Offerors is determined based on initial RFP review and scoring, consideration **may** be given to exceptions to allow for a more complete analysis and Offeror comparison.

10.10 Description of System and Services

Provide a detailed description of the proposed system hardware and software platform and services to be provided, as outlined in Section 6.0 of this RFP. Block diagrams, equipment layouts, and equipment lists must be included to provide a complete and comprehensive description of the hardware configuration that the Offeror is proposing. The County reserves the right to purchase the hardware and services proposed by an Offeror in order to obtain the least expensive means for obtaining the equipment and services being proposed. In instances where the County elects to purchase the hardware and services direct, Offerors are still responsible for certifying the hardware components, system configuration and services needed to meet the County’s requirements as defined in the RFP. A list and description of the software and documentation that is required to operate the proposed hardware/software configuration must also be included within this segment.

Network Architecture – Offerors must also indicate whether their solution must operate on a closed network or if it can be installed on a shared network such as the proposed County IT network. Offerors must provide their installation preference and a brief explanation (no more than two [2] pages) as to why they have this preference. Offerors must provide any known advantages or disadvantages to use of either a closed or shared network solution.

Offerors may also include information describing additional functionality, competitive advantages, and/or life-cycle cost effectiveness of their system, whether or not explicitly required by this RFP.

10.11 Reference Sites

Provide, at a minimum, five (5) reference sites of similar size and complexity where the system being proposed has been installed and in operations for at least 12 months along with a contact name, phone number, e-mail address, physical address, and installed applications, version numbers if applicable, department size, average annual CAD system events, served population and installation date.

10.12 Proposed Services

Provide a list of all proposed services including hardware installation, integration services, implementation to include functional testing, system cutover, documentation and training.

Offerors must describe the types of training classes that will be conducted, the number of persons that can be trained in each session, and the total number of hours required for each person to be trained. The training plan must provide for rotating shift operations and 7-day a week operations.

Offerors must provide sample test plans (related to testing requirements outlined in Section 7.2.).

10.13 Project Approach

Provide a description of the proposed project approach.

10.14 Delivery and Implementation Schedule

Provide a preliminary project plan that includes a delivery and implementation schedule with an assumed start date of March 1, 2013.

10.15 Conversion Analysis and Assessment Outline

As part of this procurement and the associated implementation, the successful Offeror shall be required to provide the County and participating agencies with a review, analysis and estimate of the effort required by the successful Offeror to include data conversion as necessary to populate the procured system, in order to help those agencies define what efforts are required to collect, prepare, and translate their current data (currently provided by the systems/vendors outlined in Table 11) so that it can be converted into the successful Offeror's product(s). The effort and cost required to provide this assessment must be provided. Specifically:

- Technical Proposal: The specific efforts and agenda proposed by the Offeror to ensure adequate review, analysis and estimate of the effort is accounted for to provide a report that fully defines the following information:

    - Consultation with each agency to determine conversion needs.
    - Specific steps and requirements needed to convert the data for each agency.
    - Cost options to convert data based on number of files and years of data to be converted.
    - Provide a conversion matrix for each system and the files to be converted that outlines a field (current system) by field (new system) map of anticipated data elements to be converted.
    - List of fields that in each agency's current system have no match in the successful Offeror's system, with available options related to the translation of those fields (i.e., written to narrative or other text-based file/field).
    - List of required/mandatory fields within the Offeror's system that have no corresponding field in their current systems from which to populate, and options available to populate those fields with either a default value or other conversion methodology, and the impacts of those options (positive and negative).
    - Final cost and timeline/schedule proposal to complete any conversion effort agreed upon between the Offeror's and participating agencies based on the assessment report and associated activities.

- Cost: Conversion cost and follow on engineering support and assistance

    - Cost should be included in the appropriate area of the provided pricing forms. The cost should be inclusive of all effort, expense, and cost to complete this activity.
    - An hourly rate for any additional conversion engineering support that may be required beyond the above deliverable or that will be used to determine final conversion cost should agencies decide to proceed forward with the data conversion.

Table 11 – Data Systems

Agency	System(s)
Loudoun County Sheriff's Office	EnRoute LERMS DSI OMS (Corrections Management) Drug Trak Gang Track IA Pro QueTel Bar-coding and Inventory Management
Middleburg Police Department	DaProSystems LERMS
Purcellville Police Department	DaProSystems LERMS
Loudoun County Fire and Rescue	Currently no FRMS, various specialized programs and databases
Loudoun County Emergency Communications Center	Enroute CAD (Fire and Law Enforcement)
Various Volunteer Fire Departments	various specialized programs and databases

10.16 Pricing Forms

Provide pricing on the pricing forms included in Exhibit B – Pricing Forms. Offerors may also include their own comprehensive, itemized pricing forms with additional details or notes to assist the County in their review. In addition, the pricing forms should include a list of all optional items and associated pricing and must be grouped separately in the Offeror's response.

The pricing information submitted must also include a hardware segment based on the hardware profile recommended by the Offeror that will ensure the optimum performance of their proposed solution. This must be priced as optional.

By virtue of submitting a proposal, Offerors warrant that costs as outlined are firm and fixed for all phases of the project. Offerors are reminded that installation of the System may occur in multiple phases and at different points in time.

10.17 Resumes of Key Staff

Provide resumes of key staff involved in the design, implementation, and management of the project, including those of project management staff for consideration by the County.

10.18 Service and Maintenance

Provide a description of any service and maintenance requirements, and warranties. Related pricing for those items must be contained in the separate pricing proposal package. Offerors must provide the anticipated start date for all maintenance and warranties.

Provide a detailed description of the maintenance plan. This description must include a description of hardware and software support services and hardware and software upgrades to be provided. Names, addresses, telephone numbers and contact person for all service facilities must be identified in the proposal. The equipment or components required on-site for emergency maintenance must be specified.

10.19 Proposal Submission Forms

Provide executed forms as required under Section 12.0 Proposal Submission Forms.

11.0 INSTRUCTIONS FOR SUBMITTING PROPOSALS

11.1 Preparation and Submission of Proposals

A. Before submitting a proposal, read the ENTIRE solicitation including the Contract Terms and Conditions. Failure to read any part of this solicitation will not relieve an Offeror of the Contractual obligations.

B. Pricing must be submitted on RFP pricing form only. Include other information as requested or required.

C. All proposals must be submitted to the Division of Procurement in a sealed container. The face of the sealed container shall indicate the RFP number, time and date of opening and the title of the RFP.

D. All proposals shall be signed in ink by the individual or authorized principals of the firm.

E. All attachments to the RFP requiring execution by the Offeror are to be returned with the proposal.

F. Proposals must be received by the Division of Procurement prior to 4:00 p.m., local Atomic time on November 14, 2012. An atomic clock is located in the Division of Procurement and can also be verified by visiting http://www.time.gov/timezone.cgi?Eastern/d/-5/java. Requests for extensions of this time and date will not be granted, unless deemed to be in the County's best interest. Offerors mailing their proposals shall allow for sufficient mail time to ensure receipt of their proposals by the Division of Procurement by the time and date fixed for acceptance of the proposals. Proposals or unsolicited amendments to proposals received by the County after the acceptance date and time will not be considered.

proposals will be publicly accepted and logged in at the time and date specified above.

G. Proposals may be either mailed or hand delivered to One Harrison Street, S.E., 4th Floor, MSC #41C, Leesburg, Virginia 20175. Faxed and e-mailed proposals will not be accepted.

H. Each firm shall submit one (1) original and 12 hard copies, 12 soft copies, one (1) redacted hard copy, and one (1) redacted soft copy of their proposal to the County's Division of Procurement as indicated on the cover sheet of this Request for Proposal. Each copy shall include a completed electronic version of the Functional Matrix as further defined in Section 10.0. The original proposal shall be clearly marked.

11.2 Questions and Inquiries

Questions and inquiries, both oral and written, will be accepted from any and all Offerors. However, when requested, complex oral questions shall be submitted in writing. The Division of Procurement is the sole point of contact for this solicitation unless otherwise instructed herein. Unauthorized contact with other Loudoun County staff regarding the RFP may result in the disqualification of the Offeror. Inquiries pertaining to the RFP must give the RFP number, time and date of opening and the title of the RFP. Material questions will be answered in writing with an Addendum provided, however, that all questions are received at least ten (15) days in advance of the proposal opening date. It is the responsibility of all Offerors to ensure that they have received all Addendums and to include signed copies with their proposal. Addendums can be downloaded from www.loudoun.gov/procurement.

11.3 Firm Pricing for County Acceptance

Proposal pricing must be firm for County acceptance for a minimum of 120 days from proposal receipt date. “Discount from list” proposals are not acceptable unless requested.

11.4 Quotations to be F.O.B. Destination - Freight Prepaid and Allowed

Any goods to be delivered to a County location shall be coordinated with the Contract Administrator prior to delivery. Such goods shall be delivered F.O.B. Destination, freight prepaid, and allowed inside delivery. COD deliveries shall be denied. The cost of freight, insurance, and all other delivery related costs shall be included in the cost of performing the work proposed in the price proposal.

11.5 Proprietary Information

Trade secrets or proprietary information submitted by an Offeror in connection with this solicitation shall not be subject to disclosure under the Virginia Freedom of Information Act; however, **pursuant to Section 2.2-**

4342 of the Code of Virginia, Offerors must invoke the protections of this section prior to or upon submission of the data or other materials, and must clearly identify the data or other materials to be protected and state the reasons why protection is necessary. Failure to abide by this procedure may result in disclosure of the Offeror's information. Offerors shall not mark sections of their proposal as proprietary if they are to be part of the award of the contract and are of a "Material" nature.

11.6 Authority to Bind Firm in Contract

Proposals MUST give full firm name and address of Offeror. Failure to manually sign a proposal may disqualify it. The person signing the proposal will show TITLE or AUTHORITY TO BIND THE FIRM IN A CONTRACT. Firm name and authorized signature must appear on proposal in the space provided on the pricing page. Those authorized to sign are as follows:

- If a sole proprietorship, the owner may sign.
- If a general partnership, any general partner may sign.
- If a limited partnership, a general partner must sign.

If a limited liability company, a "member" may sign or "manager" must sign if so specified by the articles or organization. If a regular corporation, the CEO, President or Vice-President must sign. Others may be granted authority to sign, but the County requires that a corporate document authorizing him/her to sign be submitted with proposal.

11.7 Withdrawal of Proposals

A. All proposals submitted shall be valid for a minimum period of 120 calendar days following the date established for acceptance.

B. Proposals may be withdrawn on written request from the Offeror at the address shown in the solicitation prior to the time of acceptance.

C. Negligence on the part of an Offeror in preparing the proposal confers no right of withdrawal after the time fixed for the acceptance of the proposals.

11.8 County Furnished Support/Items

The estimated level of support required from County personnel for the completion of each task shall be itemized by position and man days.

Offerors shall indicate the necessary telephones, office space and materials the Offeror requires. The County may furnish these facilities if the County considers them reasonable, necessary, and available for the Contractor to complete his task.

11.9 Subcontractors

Offerors shall include a list of all subcontractors with their proposal. Proposals shall also include a statement of the subcontractors' qualifications. The County reserves the right to reject the successful Offeror's selection of subcontractors for good cause. If a subcontractor is rejected, the successful Offeror may replace that subcontractor with another subcontractor subject to the approval of the County. Any such replacement shall be at no additional expense to the County nor shall it result in an extension of time without the County's approval.

11.10 Use of Brand Names

Unless otherwise provided in an RFP, the name of a certain brand, make or manufacturer does not restrict Offerors to the specific brand, make or manufacturer named; it conveys the general style, type, character, and quality of the article desired, and any article which the County, in its sole discretion, determines to be the equal of that specified, considering quality, workmanship, economy of operation, and suitability for the purpose intended, shall be accepted. Any catalog, brand name or manufacturer's reference used in the RFP is descriptive -- NOT restrictive – it is to indicate type and quality desired. Proposals on brands of like nature and quality will be considered. If offering on other than reference or specifications, proposal must show manufacturer, brand or trade name, catalog number, etc., of article offered. If other than brand(s) specified is offered, illustrations and complete description must be submitted with proposal. Samples may be required. If Offeror makes no other offer and takes no exception to specifications or reference data, he will be required to furnish brand names, numbers, etc., as specified. Offerors must certify that item(s) offered meet and/or exceed specifications.

11.11 Late Proposals

LATE proposals will be returned to Offeror UNOPENED, if RFP number, acceptance date and Offeror's return address is shown on the container.

11.12 Rights of County

The County reserves the right to accept or reject all or any part of any proposal, to waive informalities, and to award the contract to best serve the interest of the County. Informality shall mean a minor defect or variation of a proposal from the exact requirements of the RFP that does not affect the price, quality, quantity, or delivery schedule for the goods, services or construction being procured**.**

11.13 Prohibition as Subcontractors

No Offeror who is permitted to withdraw a proposal shall, for compensation, supply any material or labor to or perform any subcontract or other work agreement for the person or firm to whom the contract is

awarded or otherwise benefit, directly or indirectly, from the performance of the project for which the withdrawn proposal was submitted.

11.14 Proposed Changes to Scope of Services

If there is any deviation from that prescribed in the Scope of Services, the appropriate line in the scope of services shall be ruled out and the substitution clearly indicated. The County reserves the right to accept or reject any proposed change to the scope.

11.15 Miscellaneous Requirements

A. The County will not be responsible for any expenses incurred by Offerors in preparing and submitting a proposal. All proposals shall provide a straight-forward, concise delineation of the Offeror's capabilities to satisfy the requirements of this request. Emphasis should be on completeness and clarity of content.

B. Offerors who submit a proposal in response to this RFP may be required to make an oral presentation of their proposal. The Division of Procurement will schedule the time and location for this presentation.

C. Selected contents of the proposal submitted by the successful Offeror and this RFP will become part of any contract awarded as a result of the Scope of Services contained herein. The successful Offeror will be expected to sign a contract with the County.

D. The County reserves the right to reject any and all proposals received by reason of this request, or to negotiate separately in any manner necessary to serve the best interests of the County. Offerors whose proposals are not accepted will be notified in writing.

11.16 Notice of Award

A Notice of Award will be posted on the County's web site (www.loudoun.gov) and on the bulletin board located in the Division of Procurement, 4th floor, One Harrison St, SE, Leesburg, Virginia 20175.

11.17 Protest

Offerors may refer to Sections 2.2-4357 through 2.2-4364 of the Code of Virginia to determine their remedies concerning this competitive process. Protests shall be submitted to the Director, Management and Financial Services.

11.18 Debarment

By submitting a proposal, the Offeror is certifying that Offeror is not currently debarred by the County, or in a procurement involving federal funds, by the Federal Government. A copy of the County's debarment

procedure in accordance with Section 2.2-4321 of the Code of Virginia is available upon request.

11.19 Proof of Authority to Transact Business in Virginia

An Offeror organized or authorized to transact business in the Commonwealth pursuant to Title 13.1 or Title 50 of the Code of Virginia shall include in its bid or proposal the identification number issued to it by the State Corporation Commission. Any Offeror that is not required to be authorized to transact business in the Commonwealth as a foreign business entity under Title 13.1 or Title 50 of the Code of Virginia or as otherwise required by law shall include in its bid or proposal a statement describing why the Offeror is not required to be so authorized. Any Offeror described herein that fails to provide the required information shall not receive an award unless a waiver of this requirement and the administrative policies and procedures established to implement this section is granted by the Purchasing Agent or his designee. The SCC may be reached at (804) 371-9733 or at http://www.scc.virginia.gov/default.aspx.

11.20 Cooperative Procurement

As authorized in Section 2.2-4304 of the Code of Virginia, this procurement is being conducted on behalf of and may be used by public bodies, agencies, institutions and localities of the several states, territories of the United States, and the District of Columbia with the consent of the contractor.

11.21 W-9 Form Required

Each Offeror shall submit a completed W-9 form with their proposal. In the event of contract award, this information is required in order to issue purchase orders and payments to your firm. A copy of this form can be downloaded from http://www.irs.gov/pub/irs-pdf/fw9.pdf.

11.22 Insurance Coverage

Offerors shall include with their proposal a copy of their current Certificate of Insurance that illustrates the current level of coverage the Offeror carries. The Certificate can be a current file copy and does not need to include any “additional insured” language for the County.

Loudoun County, Virginia

Division of Procurement
1 Harrison Street, 4th Floor
Leesburg, Virginia 20175

12.0 PROPOSAL SUBMISSION FORMS
PUBLIC SAFETY TECHNOLOGY SYSTEMS

THE FIRM OF:_____

Address:_____

_____

FEIN_____

Hereby agrees to provide the requested services as defined in Request for Proposal No. QQ-01724 for the price as stated in the price proposal.

Total Cost of System including Year 1 Maintenance	$_____
Year 2 Maintenance	$_____
Year 3 Maintenance	$_____
Year 4 Maintenance	$_____
Year 5 Maintenance	$_____
Software Escrow for Year 1	$_____

(If escrow fee increases after first year, Offerors shall include detailed cost information as part of their cost proposal as required under Section 10.0.)

Return the following with your proposal. If offeror fails to provide with their proposal, items should be provided within twenty-four (24) hours of proposal opening.

1. W-9 Form: _____
2. Certificate of Insurance: _____
3. References (on County form): _____
4. Addenda, if any (Informality): _____

Loudoun County, Virginia

Division of Procurement
1 Harrison Street, 4th Floor
Leesburg, Virginia 20175

PROPOSAL SUBMISSION FORMS
PUBLIC SAFETY TECHNOLOGY SYSTEMS

Failure to provide the following items with your proposal shall be cause for rejection of proposal as non-responsive and/or non-responsible. It is the responsibility of the offeror to ensure that it has received all addenda.

ITEM:	INCLUDED: (X)
1. Minimum Qualification Documentation	
2. Addenda, if any:	_____
3. Payment Terms:	_____ net 30 or _____ Other
4. F.O.B. Destination-Freight Prepaid and Included:	_____
5. Proof of Authority to Transact Business in Virginia Form:	_____

Person to contact regarding this proposal:_____

Title:_____Phone:_____Fax:_____

E-mail:_____

Name of person authorized to bind the Firm (11.6):_____

Signature:_____Date:_____

By signing and submitting a proposal, your firm acknowledges and agrees that it has read and understands the RFP documents and agrees to the Contract Terms and Conditions as contained herein

Loudoun County, Virginia

www.loudoun.gov/procurement

Department of Management and Financial Services
Division of Procurement
1 Harrison Street, S.E., 4th Floor, MSC#41C, Leesburg, VA 20175

PROOF OF AUTHORITY TO TRANSACT BUSINESS IN VIRGINIA

THIS FORM MUST BE SUBMITTED WITH YOUR BID/PROPOSAL. FAILURE TO INCLUDE THIS FORM SHALL RESULT IN REJECTION OF YOUR BID/PROPOSAL

Pursuant to Virginia Code §2.2-4311.2, a bidder/offeror organized or authorized to transact business in the Commonwealth pursuant to Title 13.1 or Title 50 of the Code of Virginia shall include in its bid/ proposal the identification number issued to it by the State Corporation Commission ("SCC"). Any bidder/offeror that is not required to be authorized to transact business in the Commonwealth as a foreign business entity under Title 13.1 or Title 50 of the Code of Virginia or as otherwise required by law shall include in its bid or proposal a statement describing why the offeror is not required to be so authorized. Any bidder/offeror described herein that fails to provide the required information shall not receive an award unless a waiver of this requirement and the administrative policies and procedures established to implement this section is granted by the Purchasing Agent or his designee.

If this bid/proposal for goods or services is accepted by the County of Loudoun, Virginia, the undersigned agrees that the requirements of the Code of Virginia Section 2.2-4311.2 have been met.

Please complete the following by checking the appropriate line that applies and providing the requested information.

A._____ Bidder/offeror is a Virginia business entity organized and authorized to transact business in Virginia by the SCC and such bidder's/offeror's Identification Number issued to it by the SCC is _____.

B._____ Bidder/offeror is an out-of-state (foreign) business entity that is authorized to transact business in Virginia by the SCC and such bidder's/offeror's Identification Number issued to it by the SCC is _____.

C._____ Bidder/offeror does not have an Identification Number issued to it by the SCC and such bidder/offeror is not required to be authorized to transact business in Virginia by the SCC for the following reason(s):

Please attach additional sheets of paper if you need to explain why such bidder/offeror is not required to be authorized to transact business in Virginia.

_____
Legal Name of Company (as listed on W-9)

_____
Legal Name of Bidder/Offeror

_____
Date

_____
Authorized Signature

_____
Print or Type Name and Title

HOW DID YOU HEAR ABOUT THIS REQUEST FOR PROPOSAL?

QQ-01742

Please take the time to mark the appropriate line and return with your proposal.

☐ Associated Builders & contractors	☐ Loudoun Times Mirror
☐ Bid Net	☐ Our Web Site
☐ Builder's Exchange of Virginia	☐ NIGP
	☐ The Plan Room
☐ Email notification from Loudoun County ☐ Dodge Reports	☐ Reed Construction Data
☐	☐ Tempos Del Mundo
☐ India This Week	☐ Valley Construction News
☐ LS Caldwell & Associates	☐ Virginia Business Opportunities
☐ Loudoun Co Small Business Development Center	☐ VA Dept. of Minority Business Enterprises
☐ Loudoun Co Chamber of Commerce	☐ RAPID

☐Other_____

SERVICE RESPONSE CARD

QQ-01742 Date of Service:_____

How did we do?

Please let us know how we did in serving you. We'd like to know if we are serving you at an acceptable level.

How would you rate the way your request for this document was handled?

Excellent ☐ Good ☐ Average☐ Fair ☐ Poor ☐

Did you have contact with Procurement staff? ☐

How would you rate the manner in which you were treated by the Procurement staff?

Excellent ☐ Good☐Average☐ Fair ☐ Poor ☐

How would you rate the overall response to your request?

Excellent ☐ Good ☐ Average ☐ Fair ☐ Poor ☐

COMMENTS:_____

_____

_____

Thank you for your response!

We can better assess our service to *you* through feedback from *you*.

Your Name: _____

Address:_____

Phone:_____(day) _____ evening

Please return completed form to: Patty Cogle • Procurement •

PO Box 7000 • Leesburg, VA 20177

RIDER CLAUSE

Use of Contract by Members of the
Northern Virginia Cooperative Purchasing Council and
the Metropolitan Washington Council of Governments

RFP QQ- 01742

This clause is intended to allow a successful contractor to offer the goods and services of the proposal to other member jurisdictions of the Northern Virginia Cooperative Purchasing Council and the Metropolitan Washington Council of Governments. If a mark is made in the **YES** column next to a member name, the pricing, terms and conditions of the final contract are offered to the appropriate member. The successful contractor may directly notify any member jurisdiction of the availability of the contract.

Offering to sell goods and services as a result of this solicitation to other member jurisdictions is voluntary on the offeror's part. A member jurisdiction's participation in the contract is voluntary, also. Any jurisdiction obligated to participate in the contract is indicated in the body of the solicitation and contract.

Each participating jurisdiction has the option of executing a separate contract with the awardee. Contracts entered into with a participating jurisdiction may contain general terms and conditions unique to that jurisdiction including, by way of illustration and not limitation, clauses covering minority participation, non-discrimination, indemnification, naming the jurisdiction as an additional insured under any required Comprehensive General Liability policies, and venue. If, when preparing such a contract, the general terms and conditions of a jurisdiction are unacceptable to the awardee, may withdraw its extension of the award to that jurisdiction. The member jurisdiction(s) which awards the contract as a result of this solicitation is responsible for the award, etc. of its portion of the contract only. The issuing jurisdiction shall not be held liable

Each member jurisdiction which purchases as a result of this offer will be responsible for placing orders directly with the successful Offeror, arranging all deliveries, reconciling discrepancies and invoices, and issuing payments.

Failure to offer the terms and conditions of the contract to any member will neither disqualify an offeror nor adversely affect the award of the contract.

OFFEROR'S AUTHORIZATION FOR PARTICIPATION:

YES	JURISDICTION	**YES**	JURISDICTION
	City of Alexandria, VA		Loudoun County Sanitation Authority
	Alexandria Public Schools		City of Manassas, VA
	Alexandria Sanitation Authority		City of Manassas Park, VA
	Arlington County, VA		City of Manassas Public Schools
	Arlington Public Schools		Maryland - National Capital Park & Planning
	Charles County Public Schools		Commission
	City of Bowie, MD		Metropolitan Washington Airports Authority
	City of College Park, MD		Metropolitan Washington Council of Governments
	Culpeper County, Virginia		Winchester, VA
	District of Columbia		Montgomery College
	District of Columbia Courts		Montgomery County, MD
	District of Columbia Schools		Montgomery County Public Schools
	District of Columbia Water & Sewer Auth		Northern Virginia Community College
	City of Fairfax, VA		Northern Virginia Planning District Commission
	Fairfax County, VA		Prince George's County, MD
	Fairfax County Public Schools		Prince George's County Public Schools
	Fairfax County Water Authority		Prince William County, VA
	City of Falls Church, VA		Prince William County Public Schools
	Fauquier County, VA		Prince William County Service Authority
	Fauquier County Schools		Town of Purcellville, VA
	City of Frederick, MD		City of Rockville, MD
	Frederick County, MD		Spotsylvania County Schools
	Frederick County Public Schools		Stafford County, VA
	City of Gaithersburg, MD		Stafford County Public Schools
	George Mason University		City of Takoma Park, MD
	City of Greenbelt, MD		Upper Occoquan Sewage Authority
	Town of Herndon, VA		Town of Vienna, VA
	Town of Leesburg, VA		Washington Metropolitan Area Transit Authority
	Loudoun County Public Schools		Washington Suburban Sanitary Commission
			Winchester Public Schools

OFFEROR SIGNATURE DATE

This form must be completed and returned with proposal. Revised 6/2006

13.0 EXHIBIT A—FUNCTIONAL SPECIFICATIONS MATRIX

Exhibit A – 1 **Functional Specifications Matrix - CAD**

Exhibit A - 2 **Functional Specifications Matrix – LERM**

Exhibit A - 3 **Functional Specifications Matrix – Corrections**

Exhibit A - 4 **Functional Specifications Matrix – FRMS**

Exhibit A – 5 **Functional Specifications Matrix – VSAS**

Exhibit A – 6 **Functional Specifications Matrix – Mobile**

Exhibit A – 7 **Functional Specifications Matrix – Interfaces**

Exhibit A – 8 **RFP Compliance Checklist**

Offeror's must download all of the documents listed above from our website: www.loudoun./procurement,

14.0 EXHIBIT B—PRICING FORMS

Offeror's must download this document from our website:
www.loudoun./procurement,

ATTACHMENT A—STATE OF VIRGINIA ACCIDENT REPORT FORM

Offeror's must download this document from our website:
www.loudoun./procurement

ATTACHMENT B—GIS SYSTEM DIAGRAMS

Offeror's must download this document from our website:
www.loudoun./procurement

ATTACHMENT C—NCR (NATIONAL CAPITOL REGION) CAD2CAD DOCUMENTATION

Offeror's must download this document from our website:
www.loudoun./procurement

ATTACHMENT D—LOSAP (LENGTH OF SERVICE AWARD PROGRAM) DOCUMENTATION

Offeror's must download this document from our website:
www.loudoun./procurement

ATTACHMENT E—GENSPOUT DOCUMENTATION

Offeror's must download this document from our website:
www.loudoun./procurement

ATTACHMENT F—MAPP (MODEL FOR ALLOCATION OF PATROL PERSONNEL) DESIGN DOCUMENT

Offeror's must download this document from our website:
www.loudoun./procurement

ATTACHMENT G—TREDS (TRAFFIC RECORDS ELECTRONIC DATA SYSTEM) CRASH REPORT SCHEMA

Offeror's must download this document from our website:
www.loudoun./procurement

ATTACHMENT H—DRUG TRAK DATABASE DOCUMENTATION

Offeror's must download this document from our website:
www.loudoun./procurement

ATTACHMENT I—INTERFACE DOCUMENTATION FOR ATAC

Offeror's must download this document from our website:
www.loudoun./procurement

ATTACHMENT J—INTERFACE DOCUMENTATION FOR COURT PAPERS

Offeror's must download this document from our website:
www.loudoun./procurement

ATTACHMENT K—INTERFACE DOCUMENTATION FOR CRIME REPORTS

Offeror's must download this document from our website:
www.loudoun./procurement,

ATTACHMENT L—INTERFACE DOCUMENTATION FOR IAPRO

Offeror's must download this document from our website:
www.loudoun./procurement,

ATTACHMENT M—INTERFACE DOCUMENTATION FOR LINX

Offeror's must download this document from our website:
www.loudoun./procurement,

ATTACHMENT N—INTERFACE DOCUMENTATION FOR OMS (CORRECTIONS) TO LINX

Offeror's must download this document from our website:
www.loudoun./procurement,

ATTACHMENT O—INTERFACE DOCUMENTATION FOR PAWNS

Offeror's must download this document from our website:
www.loudoun./procurement,

ATTACHMENT P—SAMPLE PROPERTY BAR CODE LABEL FROM QUETEL EVIDENCE TRACKING SYSTEM

Offeror's must download this document from our website:
www.loudoun./procurement,

ATTACHMENT Q—LIDS (LOCAL INMATE DATA SYSTEM)

Offeror's must download this document from our website:
www.loudoun./procurement,

ATTACHMENT R—INMATE TELEPHONE ID NUMBER RELEASE FORM

Offeror's must download this document from our website: www.loudoun./procurement,